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CONSUMERS' RESEARCH

Bulletin

July 1948

CONTENTS

For the Home

Lawn Mowers..... 5
Mattresses..... 11
Electric Hedge Trimmers..... 16
Pliable Plastic Materials for Household Use.. 21
Painting Small Concrete Block Buildings.... 23

Food

Canned Peas and Canned Corn..... 7

Automobiles

Ten of the 1948 Automobiles..... 13
Car Vacuum Cleaner..... 24

Television

Present Television Boom..... 17

Miscellaneous

New Book on Hearing Problems—
A Review..... 12

Features

Off the Editor's Chest..... 2
The Consumers' Observation Post..... 3
Brief 1948 Cumulative Index..... 20
Phonograph Records.... Walter F. Grueninger 25
Ratings of Motion Pictures..... 27

CONSUMERS' RESEARCH

Vol. 22 • No. 1 **BULLETIN** July 1948

Off the Editor's Chest

A visit to an assembly line of some near-by plant which manufactures consumer appliances should be a "must" on the vacation program of every student of political science, economics, or consumer education this summer. The actual operation of some aspect of a well-managed unit of the American system of mass production will also be of interest to the analytical-minded consumer, particularly in view of the fact that this is a presidential election year when many charges and counter charges will be made regarding the failures and achievements of American industry, by political candidates with little or no actual knowledge of what they are talking about, and who will, often as not, only be reciting phrases written for them by some clever ghost writer.

The secret of this country's ability to out-produce the rest of the world is to be found in the assembly-line technique and the fine scientific and engineering skills that go with it. To watch a small table-model radio set take form from its start at the head of the line as a light metal shell or chassis through some 20 or 30 simple but skillfully planned steps on a slowly moving belt to the end where it is placed in a plastic cabinet and passed along to the inspectors, testers, and adjusters is to see the quintessence of our industrial system, and the most characteristic difference between the production practices of the 20th and those of earlier centuries.

The whole process appears very casual and unhurried. Each girl performs two or three small operations, such as welding or soldering a small coil or resistor at its ends to a fitting, tube base, or to the chassis. Her job demands a certain amount of manual dexterity, but she does not need any specialized training in the principles of electronics or radio design, or even in the diversified manual operations that would be required of a person putting together a custom-made set from start to finish. The design has already been worked out specially for the needs of production-line manufacture, by a small group of highly trained experts. Then the design is passed along to the production men, who work out each detail and step that will be needed on the assembly line to produce the finished article.

The charge has occasionally been made that big corporations do not make appliances as well as they know how, with the implication that such corporations are somehow cheating consumers on value and quality. Such criticism is commonly made with the assumption that if industries were put under government control, and if our own present economic system were replaced by something different, the consumer would, as a matter of course, be provided with an ample supply of products, all of the best possible quality. Fortunately, there are many consumers who have had experience and considerable contact with manufactured articles, good and bad, and who are aware of the need to look beyond attractively presented advertising appeals and sales claims, even when those have to do, not with vacuum cleaners, radio sets, and watches, but with the workings of some theo-

(Continued on page 31)

Scientific and Technical Experts and Editors: F. J. Schlink, R. Joyce, M. C. Phillips, Helen P. Alleman, A. R. Greenleaf, Charles L. Bernier, and Dwight C. Aten. Editorial Assistants: Mary F. Roberts and B. Beam.

Symbols used to indicate sources of data and bases of ratings: A—recommended on basis of quality; AA—regarded as worthy of highest recommendation; B—intermediate with respect to quality; C—not recommended on basis of quality; cr—information from Consumers' Research's own tests or investigations; 1, 2, 3—relative prices, 1 being low, 3 high. Note that price and quality are completely differentiated in CR's listings; **a quality judgment is independent of price**; 47, 48—year in which test was made or information obtained or organized by the staff of Consumers' Research.

It will be advantageous if you will, whenever possible, send prompt notice of change of address at least 5 weeks before it is to take effect, accompanying your notice with statement of your old address with name in full. At least a month's notice must be given in any case. This rule, however, regarding long advance notice does not apply to military personnel.

¶*CR will, of course, gladly change addresses for men and women in the services as often as required by changes in station and other circumstances.*

★★★For a brief cumulative index of 1948 BULLETINS preceding this issue, see page 20.

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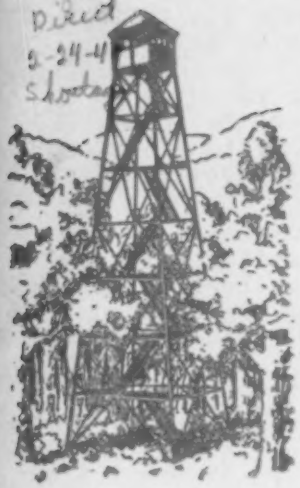


The Consumers' Observation Post

SUNGLASSES have greatly improved in quality in recent years, according to Postgraduate Medicine. Even the dark glasses for sale in drugstores and five-and-dime stores are, in the magazine's words, "remarkably well made and free from flaws and defects of curvature." The medical journal warns, however, that continuous use of tinted glasses is undesirable because the eyes may become so dependent on them that they will be unable to meet the customary light and glare naturally. Of the tints, the one known as "smoked" or gray is considered the best. A greenish tint called "calobar" is satisfactory, and amber is not objectionable. Blue glasses are not recommended.

* * *

THE PAN in which they are baked may determine whether the cookies, cake, or bread come out of the oven an even brown, or light on one side and dark on the other. Studies by specialists in the U. S. Department of Agriculture indicated that enamelware baking pans gave the deepest brown, but the color is often mottled because the material does not distribute the heat evenly. Glass ranked next in rapid browning, particularly in an electric oven. In aluminum and tin the browning was less rapid and usually more even. Browning is also more even when cakes are baked in round rather than square pans. Cookies do best when baked on a flat sheet or on the bottom of an inverted pan.

* * *

CITY FOLK who make week-end trips to the country need to be warned against some of the country insects, and people living in the country, too, will need to have the matter in mind. It appears that the carpet beetle is particularly fond of white and creamy white flowers and the unwary visitor who brings back a bouquet of spirea, roses, fruit blossoms, deutzia, asters, and a number of others, may be introducing a voracious insect into his home, reports Pests. That journal also suggests the frequent examination of woolen clothing, particularly sport clothes which often become perspiration soaked and which may not be used daily. If they are allowed to hang in the closet soiled for any length of time they are likely to be attacked by moths.

* * *

COTTON GARMENTS treated with a "wrinkle-resistant" process that will restore them to nearly their original freshness when they have been allowed to stand overnight are promised for fall. The finish, called Superset, is put out by the American Cyanamid Co., which claims that it will also control shrinkage to 2 percent or less. Anything that will keep cotton garments from mussing in hot, sticky weather will be gratefully received, provided the processing does not put garments in the upper price brackets.

* * *

THE CAUSES OF TOOTH DECAY, like the common cold, are the subject of continuing study of many a research group. An excellent summary of findings to date appeared several months ago in a Bulletin of the Department of Health of Kentucky which pointed out that there is no scientific evidence to substantiate the prevalent ideas that tooth brushing will prevent dental caries; that the consumption of vitamins and minerals in excessive amounts will in themselves insure healthy teeth; or that the consumption of uncooked fruits and vegetables, the so-called cleansing foods, has any material effect on reducing tooth decay. In another study reported in the Pennsylvania State Dental Journal by Walter S. Weisz, D.D.S., Pittsburgh, the conclusion was drawn that sweets appear to be the decisive factor in causing lesions (damage) in the enamel of the teeth.

TELEPHONE USERS in this country are contributing a sizable sum to the upkeep of the federal government in Washington, D.C., in the taxes they pay. The federal tax on local telephone service, according to one of the major telephone companies, is 15 percent. On long distance calls, the tax is 25 percent, a rate higher than that on furs, jewelry, and perfume, for which the rate is 20 percent. People need to be reminded sometimes of the amount of tax they pay; many are quite unaware that telephone calls—no luxury surely—are taxed very heavily.

* * *

MANY HOUSEHOLD INSECT PESTS may be stopped before they get a start by sprinkling 10 percent DDT powder in cracks in the floor under the linoleum or carpet and along the baseboards, and under shields and around pipes where plumbing goes through the floor or walls. (DDT is not fully dependable against roaches, however; often has little effect.) DDT is found in new anti-moth preparations. One of the most effective combinations uses chlordan, a chlorinated hydrocarbon, and DDT. Chlordan supplies the fumigant action and DDT acts as a contact and stomach poison for both moth and larvae. The new "economic poisons" law which went into effect on June 25, 1948, requires the listing of ingredients of insecticides on the label and warnings as to the limitations and hazards of certain products. It is known, for example, that the hazards of such new materials as chlordan have not been fully explored. Perhaps in time these poisons will not be needed to eliminate insect pests, for it has been suggested that their destruction may one day be accomplished by the use of ultrasonic energy ("sound" at frequencies beyond what the ear can hear).

* * *

CONTAMINATED DRINKING WATER is held to be the cause of a new type of disease called "blue baby," a condition where a child does not get enough oxygen in his blood stream and slowly strangles to death. In one year in Illinois, 35 cases were reported, with 5 deaths. The best known form of this disease is caused by malformation of the heart, but the cyanosis of the Illinois cases is believed by James G. Weart of the division of sanitary engineering of the Illinois Department of Public Health, to be due to an excessive content of nitrogen compounds in water drawn from shallow wells. The excess nitrogen, in the form of nitrates, by a series of chemical conversions within the body, interferes with the ability of the blood to carry oxygen to the tissues. A large proportion of wells in many parts of Illinois carry considerable amounts of the nitrate materials, but the problem quite likely exists in other places. For example, the blue baby disease, doubtless also caused by high nitrate water, has also been reported in Iowa, Kansas, Nebraska, Oklahoma, Texas, Missouri, and Minnesota. (The maximum safe nitrate content of water is only about 1 part in 100,000.)

* * *

THE MEAT SHORTAGE that was predicted by government experts for this past spring failed to materialize, even in the face of a strike of one union against the big meat packers. It is expected, however, that supplies of beef will be lower than usual this summer, which means that prices will remain high. The number of cattle in feed lots in the corn-belt states was more than 25 percent below that of the previous year. On the other hand, stocks of pork in cold storage on April 1, 1948, were 60 percent above those of a year ago.

* * *

TOO FREQUENT WASHING of the hands with soap and water is known to have adverse effects, causing dermatitis, particularly on the back of the hand where the skin is thinner and more sensitive than that of the palms. In communities where the water supply is chlorinated to counteract pollution, Dr. Lester Hollander of Pittsburgh reports that there may be sufficient chlorine, sulfur, or other disinfectant materials in the water to cause chemical damage to the skin. One naturally thinks of the far greater damage that may be done to the internal tissues and mucous surfaces of the body by chlorine and other substances used in disinfection of water supplies.

* * *

THE HEALTHY SKIN is no longer regarded as impervious to the entry of toxic substances that could be dissolved in water. At one time, some ventured to poke considerable fun at CR for even suggesting that arsenic, for example, could penetrate the unbroken scalp, when applied in a hair tonic. The accep-

(The continuation of this section is on page 29)

Lawn Mowers

IN ADDITION to examinations and measurements of the mechanical features in general accordance with Federal specifications, the following tests were made. Ability to shear newspaper over the entire length of the bed knife. (All except the *F & N Arrow* and *Wards*, Cat. No. 8268, passed this test satisfactorily.) Tractive force to determine ease of pushing. Hardness tests of blades. A use test in cutting grass was also made. All of the mowers were equipped with rubber tires. The *Mohawk "48"*, *Jacobsen "18"*, and *Michigan Noiseless* were not equipped with grass-catcher hooks. Several of the mowers could not be adjusted to cut the grass to more than 1¾ inches in height. In some regions this can be a serious disadvantage, for in dry weather the grass should not be cut to less than 2 inches.

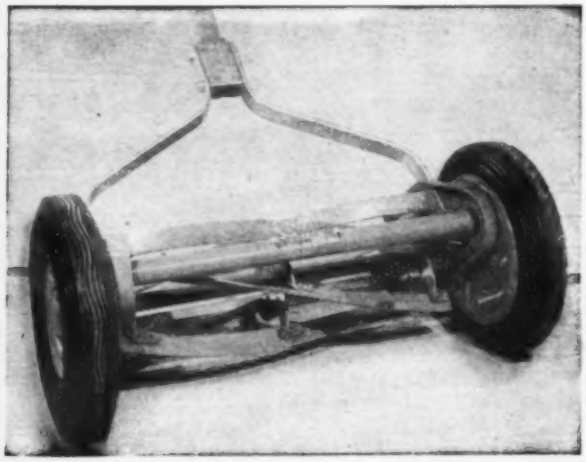
Ratings are cr48.

Editor's Note:

IN order to get the information to subscribers at the earliest possible moment, so that it may be of maximum use during the current season, the results of CR's tests on lawn mowers are presented in very abbreviated form, with a minimum of discussion of design and other problems. Unfortunately, the lawn mowers do not appear on the market much ahead of the grass cutting season; those in the present test were purchased as soon as they were available, and the tests were completed as quickly as possible, and given precedence over other important but less seasonal items.

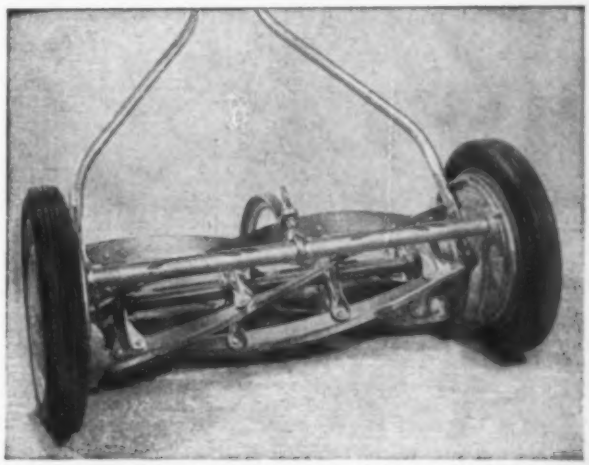
A. Recommended

Craftsman "80" (Yardman Inc., Jackson, Mich.; Sears-Roebuck's Cat. No. 8171) $19.50. Weight, 36 lb. (exceptionally light). Width of cut, 16 in. Rear roller of hollow steel 2¼ in. in diameter (subject to rusting unless special precautions are taken). Bed knife adjusted



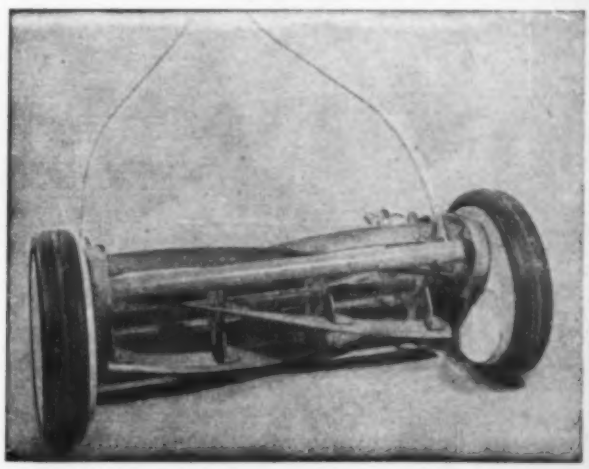
by 2 nuts on screw eye (satisfactory). Cutting height adjustment, ¾ in. to 1⅛ in. Reel blades and pawls of satisfactory hardness, but hardness of bed knife below Federal specification requirements. Pinions, soft; appeared to be made of powdered metal. Very quiet in operation and relatively easy to push (partly due to width of cut being less than that of other mowers tested). **2**

Eclipse De Luxe (Eclipse Lawn Mower Co., Prophetstown, Ill.) $29.50. Weight, 51 lb. (heavy). Width of cut, 18 in. Bed knife adjusted by opposed nuts on a single rigid center bar (judged desirable). Cutting height adjustment range, ⅛ in. to 1-9/16 in. All vital parts were of satisfactory hardness. Rather heavy;



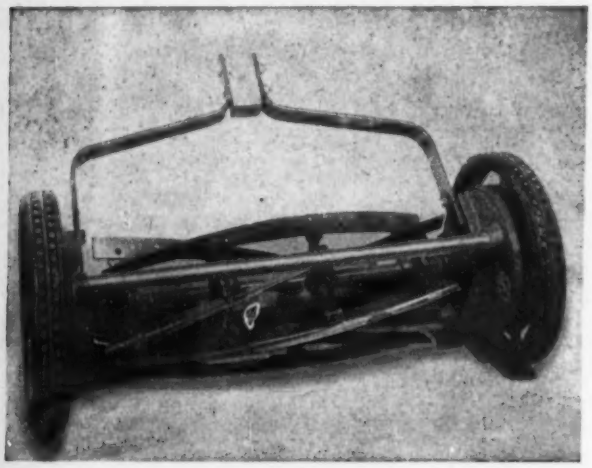
required above-average effort to push on level ground. A good rugged mower. **3**

Michigan Noiseless, Model "75"A (Reo Motors Inc., Lawn Mower Division, Lansing, Mich.) $29.95. Weight, 39.5



lb. (light). Width of cut, 16¾ in. Bed knife adjusted by 2 heavy brass screws, one at each end, with handles (desirable and convenient). Cutting height adjustment, 15/16 in. to 1¾ in. Hardness of blades, pawls, and bed knife, below Federal specification requirements. Drive gear consisted of a piece of roller chain secured in the form of a rigid ring, ingenious and should prove durable. Very smooth and quiet in operation, but hard to push. **3**

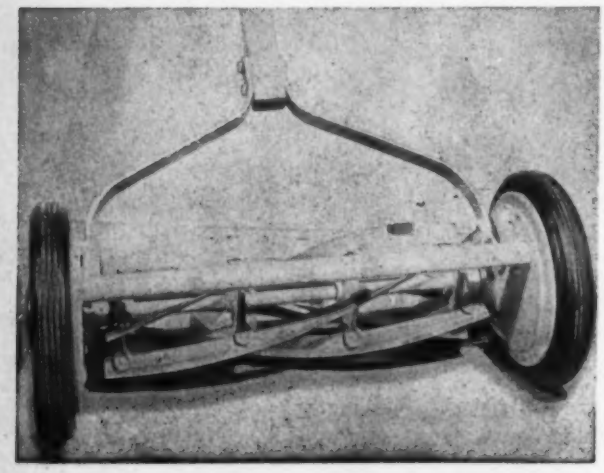
Bartlett (Pennsylvania Lawn Mower Co.'s No. 17; distrib. Hibbard, Spencer, Bartlett & Co., Chicago) $32.95. Weight, 47 lb. (heavy). Width of cut, 16¾ in. Bed knife adjusted by conventional method using 2 opposed



screws (somewhat tedious to adjust). Cutting height adjustment, ½ in. to 1⅝ in. Blades and pawls, very hard, but bed knife failed by small margin to meet Federal specification for hardness. A sturdily built mower, somewhat noisy in operation. Force required to push, about average. **3**

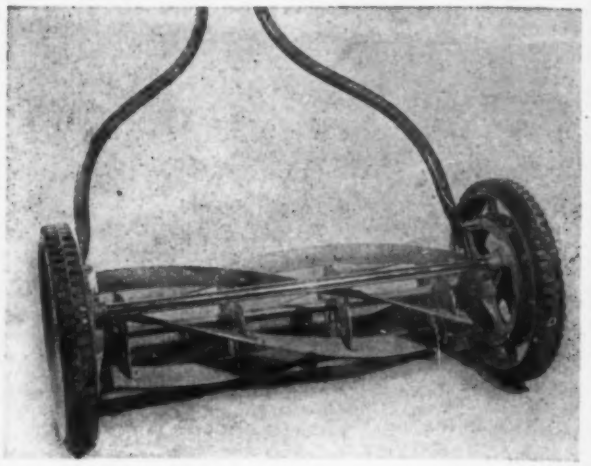
B. Intermediate

F & N Arrow (F & N Lawn Mower Co., Richmond, Ind.) $23.95. Weight, 46 lb. (heavy). Width of cut, 17¾ in. Bed knife adjusted by 2 opposed screws (tedious to adjust). Cutting height adjustment, ⅝ in. to 1⅝ in.



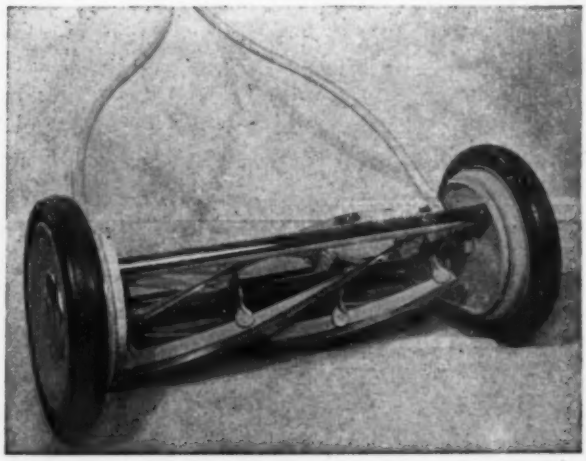
Hardness of blades, below Federal specification requirements. Failed to cut newspaper for a length of 4 in. along bed knife. Wheel bearings cast integral with frame (undesirable). Noisy. Force required to push, about average. **2**

Mohawk "48" (Coldwell Lawn Mower Division, Coldwell-Philadelphia Lawn Mower Co., Inc., Newburgh, N. Y.) $20.95. Weight, 42 lb. Width of cut, 17¾ in. Cutting height adjustment, ⅝ in. to 1-7/16 in. Met



Federal specification for hardness of vital parts, except for reel blades, which were slightly below requirements. Protection of gearing from grass clippings, poor. Wheel bearings cast integral with frame (undesirable). Force required to push, about average. **2**

Wards (Montgomery Ward's Cat. No. 8268) $22.45. Weight, 43 lb. Width of cut, 17⅞ in. Practically iden-



tical with the *F & N Arrow* except that *Wards* had steel end frames and better wheel bearings. Failed to cut newspaper for a length of 1½ in. at each end of bed knife. **2**

Clemson E 17 (Clemson Bros., Inc., Middletown, N. Y.) $29.95. Weight, 28 lb. (very light, achieved by use of light metal alloys and plastic). Width of cut, 16¾ in. Bed knife adjusted by 2 springs and screws (desirable). Cutting height adjustment, 7/16 in. to 2⅞ in. (one of 2 mowers that provided the full range desirable). Hardness of cutting blades, pawls, and pinions, satisfactory,

Pincor, Model P17-A (Pioneer Gen-E-Motor Corp., Chicago) $52.50. Weight, 7 lb. 2 oz. Blade, 11-1/2 in. long. Rated watts, 115 (120). Cut satisfactory, but not quite as good or as easy to handle as A-Recommended hedge trimmers.

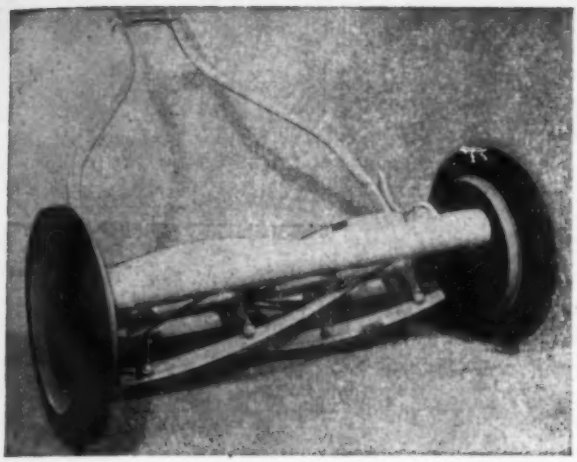
CORRECTIONS TO CONSUMERS' RESEARCH BULLETIN OF

JULY 1948

Extenders for Bed Rails p. 30	The manufacturer of the Long Boy Bed Rail Extensions informs us that extensions increasing the bed length by 3 inches are now available in addition to the 6- and 10-inch sizes, and that all three sizes come in blonde, mahogany, maple, and walnut. These extensions are made of steel; they do not fit metal beds unless the beds have bed-hook-type rails similar to ordinary wooden bed rails.
Lawn Mowers p. 6	Change rating of Clemson E 17 from B. Intermediate to C. Not Recommended. Several reports have been received that the plastic handle is not sufficiently strong, and some have broken, rendering the mower useless until a new handle could be supplied. In one case at least, replacement of the handle was made without charge to the purchaser.
Electric Hedge Trimmers p. 17	Delete listing of Pincor, Model P-17, and substitute following which refers to the later, improved Model P17-A:

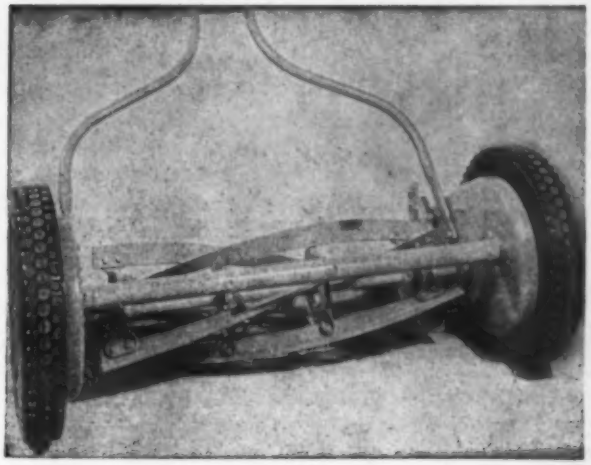
B. Intermediate

Pincor, Model P17-A (Pioneer Gen-E-Motor Corp., Chicago) $32.50. Weight, 7 lb. 2 oz. Blade, 11-1/2 in. long. Rated watts 115 (120). Cut satisfactory



but as bed knife was formed of sheet metal of low hardness, durability of this part is questionable. Easy to push; noise of operation, moderate. 3

Jacobsen "18" (Johnston Lawn Mower Co., Ottumwa, Iowa) $31.50. Weight, 43 lb. Width of cut, 17¼ in. Bed knife was easily adjusted by worm screw device (desirable). Cutting height adjustment, 11/16 in. to 2½ in. (see comment under *Clemson E 17*). Hardness of reel blades and bed knife, satisfactory, but hardness of pawls, low. Drive gear of folded steel strip (not a cor-



rect tooth form), and pinions of laminated steel stampings; durability of gears cannot be predicted. Force required to push, about average; quiet in operation. 3

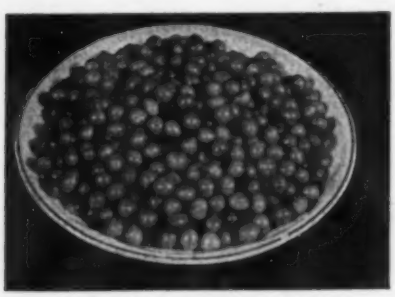
Canned Peas and Canned Corn

THE government grades for most canned vegetables are: Fancy (Grade A), Extra Standard (Grade B), and Standard (Grade C). There is also a below Grade C quality known as Substandard.

Canned Peas

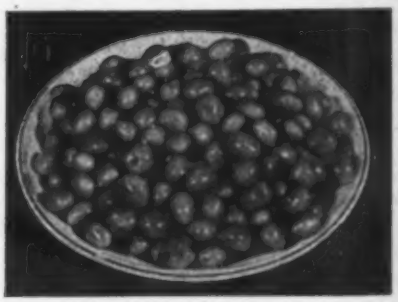
Canned peas are classified as Alaskas, which are smooth skinned and may be labeled Early, June, or Early June, and Sweet Peas, which are wrinkled varieties and are sometimes labeled Sugar Peas. Pea sizes run from No. 1 sieve, called tiny, to No. 7 sieve, or large. Garden run peas are unsorted, and mixed sizes are three or more consecutive sizes packed together.

Salt, sugar, dextrose, spices, flavoring, and artificial coloring are optional ingredients. Any of the last three, if used, must be mentioned on the label. When salt or sugar is used, small amounts of certain alkalies (sodium carbonate, calcium hydroxide, and magnesium hydroxide) may be used. These chemicals are used to make the peas slightly alkaline during and after the canning process. Under



Small sifted peas

Mixed peas—large, medium, small



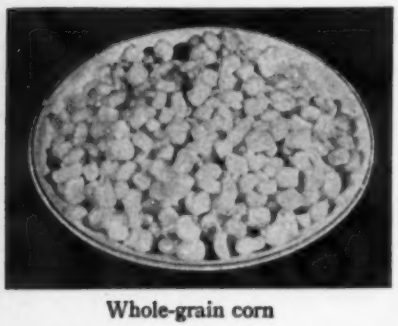
Large size peas

these conditions, the green color of fresh peas is supposed to be largely retained without injuring the peas. If such alkalies are used, the label must either mention them by name or state "Traces of alkalis added." None of the canned peas included in this study were so labeled.

Grade A peas must be tender and have a normal flavor and be of uniform color. The liquor in which they are packed should be almost clear, and peas should be practically free from defects and foreign material, such as pea pods and thistle buds.

Canned Corn

Corn is canned in two styles. One is cream style or crushed corn, which is prepared by cutting through tops of the kernels and adding material scraped from the cut kernels and sufficient liquid to produce a cream-like consistency in the finished product. Starch may be added to this corn to prevent lumpiness, and when this is done, the label must bear a statement regarding the added starch.



Whole-grain corn

Whole-grain corn is removed from the cob in such a manner as to leave the grain substantially whole. It is packed in a brine consisting of salt, sugar, and water, or may be vacuum packed.

Cream-style corn

All canned corn should, of course, be free from silk, husks, bits of cob, and other foreign material. Grade A corn must be practically free from them, and should have a clear, bright color. Cream style corn is sometimes overprocessed; when it is, it acquires a brownish shade due to a caramelization of its natural sugar.

The drained weight of all samples of whole-grain corn tested met Federal Specifications (not less than 13.5 ounces for a No. 2 can and 12 ounces for a vacuum-packed squat can), except as noted. The actual drained weights are reflected in the prices per pound of contents which were calculated on the basis of drained weight, and in the price ratings (explained near the bottom of page 2 of this BULLETIN). There are no drained weight requirements for canned peas, for the reason that the peas are required to fill the can regardless of the amount of liquor present. (For instance, if there is liquor above the peas when they are returned to the can after being taken out, the can is classed as Substandard because slack filled.)

In order to permit comparison of costs to consumers, prices in the listings have been reduced to a per-pound basis, and this per-pound figure appears in parentheses, after the price per can. In the case of whole-grain corn, prices were computed on a drained weight basis.

Ratings are cr48.

PEAS

A. Recommended

Byerly's Mellow Fancy Sweet (Distrib. J. A. Byerly Co., Inc., Owosso, Mich.) 1 lb. 4 oz., 19c (15.2c). Contained No. 5 sweet peas. Graded Fancy (Grade A). **2**

Hunt's Tender Garden, Mixed Sizes Sweet (Distrib. Hunt Foods Inc., San Francisco) 1 lb. 4 oz., 21c (16.8c). Seasoned with sugar and salt. Contained ungraded sweet peas. Graded Fancy (Grade A). Misbranded as to size. **2**

Kroger Young Tender Sweet, Medium Size (Distrib. The Kroger Co., Cincinnati) 1 lb. 4 oz., 18c (2 for 35c) (14.4c). Contained No. 4 sweet peas. Graded Fancy (Grade A). **2**

Le Sueur Very Young Small Early (Distrib. Minnesota Valley Canning Co.) 1 lb. 1 oz., 19c (17.6c). Seasoned with sugar and salt. Contained No. 3 Alaska peas. Graded Fancy (Grade A). **2**

Green Giant Great Big Tender Sweet (Distrib. Minnesota Valley Canning Co., Le Sueur, Minn.) 1 lb. 1 oz., 20c (18.8c). Seasoned with sugar and salt. Contained ungraded sweet peas. Graded Fancy (Grade A). **3**

Hatchet Large Tender Sweet (Distrib. The Twitchell-Champlin Co., Portland, Maine) 1 lb. 4 oz., 25c (20c). Contained No. 6 sweet peas. Graded Fancy (Grade A). **3**

Libby's Tender Jumbos Sweet (Distrib. Libby, McNeill & Libby, Chicago) 1 lb. 4 oz., 23c (18.4c). Seasoned with sugar and salt. Contained No. 4 and 5 sweet peas. Graded Fancy (Grade A). **3**

Monarch Sweet Medium Sifted, Size 3 (Distrib. Reid, Murdoch & Co., Chicago) 1 lb. 4 oz., 27c (21.6c). Seasoned with sugar and salt. Contained No. 4 sweet peas. Graded Fancy (Grade A). Misbranded as to size. **3**

Teenie Weenie Small Tender Sweet, Size 2 (Distrib. Oconomowoc Canning Co., Oconomowoc, Wis.) 1 lb. 4 oz., 25c (20c). Found to contain No. 3 sweet peas. Graded Fancy (Grade A). Misbranded as to size. **3**

White Rose Small Sweet, No. 2 Sieve (Distrib. Seeman Bros., Inc., N. Y. C.) 1 lb. 4 oz., 29c (23.2c). Contained No. 2 and 3 sweet peas. Graded Fancy (Grade A). Misbranded as to size. **3**

B. Intermediate

Argo Sugar (Distrib. California Packing Corp., San Francisco) 1 lb. 1 oz., 14c (13.2c). Contained No. 6 sweet peas. Graded Extra Standard (Grade B). **1**

Gardenside Sweet, (Distrib. Table Products Co., Oakland, Calif.) 1 lb. 4 oz., 13c (2 for 25c) (10.4c). Contained No. 5 sweet peas. Graded Extra Standard (Grade B). **1**

Reliable Mixed Sizes Sweet Grade A (Distrib. The Great Atlantic & Pacific Tea Co., N.Y.C.) 1 lb. 4 oz., 17c (13.6c). Contained ungraded sweet peas. Graded Extra Standard (Grade B). Misbranded as to size. **1**

Spring Kist, Size 5 Sweet Wrinkled (Distrib. Eddington Canning Co., Inc., Springville, Utah) 1 lb. 4 oz., 17c (13.6c). Contained No. 4 sweet peas. Graded Extra Standard (Grade B). **1**

Briardale, Blended Sweet (Distrib. The Briardale Co., Des Moines) 1 lb. 4 oz., 20c (16c). Contained ungraded sweet peas. Graded Extra Standard (Grade B). **2**

Davis County, Syracuse Family Style Sweet (Distrib. Kaysville Canning Corp., Kaysville, Utah) 1 lb. 4 oz., 18c (14.4c). Contained No. 5 and 6 sweet peas. Graded Extra Standard (Grade B). **2**

DelMonte Early Garden Sugar, Mixed Sizes (Distrib. California Packing Corp.) 1 lb. 4 oz., 21c (16.8c). Seasoned with sugar and salt. Contained No. 6 sweet peas. Graded Extra Standard (Grade B). Misbranded as to size. **2**

Garden Patch, Sweet Mixed Sizes (Distrib. Minnesota Valley Canning Co.) 1 lb. 4 oz., 18c (14.4c). Seasoned with sugar and salt. Contained No. 6 sweet peas. Graded Extra Standard (Grade B). Misbranded as to size. **2**

Hacienda Garden Sweet (Distrib. Juillard-Cockcroft Corp., San Francisco) 1 lb. 4 oz., 19c (15.2c). Contained ungraded sweet peas. Graded Extra Standard (Grade B). **2**

Kuner's Champion Sweet Large, Size 5 (Kuner-Empson Co., Brighton, Colo.) 1 lb. 4 oz., 19c (15.2c). Seasoned with sugar and salt. Contained No. 5 and 6 sweet peas. Graded Extra Standard (Grade B). Misbranded as to size. **2**

Lakeside Jun'ets Medium No. 3 June (Lakeside Packing Co., Manitowoc, Wis.) 1 lb. 4 oz., 18c (2 for 35c) (14.4c). Seasoned with sugar and salt. Contained No. 3 Alaska peas. Graded Extra Standard (Grade B). **2**

Peter-Pan Young Sweet Medium Size (Distrib. J. B. Inderrieden Co.; Peter Pan Inc., subsidiary, Chicago) 1 lb. 4 oz., 18c (2 for 35c) (14.4c). Seasoned with sugar and salt. Contained No. 4 sweet peas. Graded Extra Standard (Grade B). **2**

Richelieu Mixed Sizes Mellow Sugar (Distrib. Sprague Warner, Chicago; Division of Consolidated Grocers Corp.) 1 lb. 4 oz., 22c (17.6c). Contained No. 5 and 6 sweet peas. Graded Extra Standard (Grade B). **2**

Sunny Rose Sweet (Distrib. Sunny Rose Foods, Cambridge, Mass.) 1 lb. 4 oz., 20c (16c). Contained No. 5 and 6 sweet peas. Graded Extra Standard (Grade B). **2**

Asco Fancy Small Early, Grade A, 1 and 2 Sieve (Distrib. American Stores, Philadelphia) 1 lb. 4 oz., 25c (20c). Contained No. 2 and 3 Alaska peas. Graded Extra Standard (Grade B). Misbranded as to grade and size. **3**

Finast Sweet (Distrib. First National Stores, Inc., Somerville, Mass.) 1 lb. 4 oz., 25c (20c). Contained No. 4 Alaska peas. Graded Extra Standard (Grade B). **3**

Grand Union Extra Sifted Early June (Distrib. Grand Union Co., N.Y.C.) 1 lb. 4 oz., 25c (20c). Contained No. 2 and 3 Alaska peas. Graded Extra Standard (Grade B). **3**

Larsen's Freshlike Garden Sweet Vacuum Packed (Distrib. The Larsen Co., Green Bay, Wis.) 14½ oz., 20c (22.1c). Contained No. 4 and 5 sweet peas. Graded Extra Standard (Grade B). **3**

Mary Dunbar Extra Sifted Early June, No. 2 Sieve (Distrib. Jewel Food Stores, Chicago) 1 lb. 4 oz., 25c (20c). Seasoned with sugar and salt. Contained No. 2 and 3 Alaska peas. Graded Extra Standard (Grade B). Misbranded as to size. **3**

Mount Hope No. 2 Sieve Fancy Sweet Sifted (Distrib. Fall River Economy Wholesale Grocery Co., Inc., Fall River, Mass.) 1 lb. 4 oz., 29c (23.2c). Contained No. 3 sweet peas. Graded Extra Standard (Grade B). Misbranded as to size. **3**

Oak Hill Big Tender Sweet (Distrib. E. C. Hall Co., Brockton, Mass.) 1 lb. 4 oz., 27c (21.6c). Contained No. 6 sweet peas. Graded Extra Standard (Grade B). **3**

S & W Big Green, Sweet Mixed Sizes, 4, 5, 6 (Distrib. S & W Fine Foods, Inc., San Francisco) 1 lb. 4 oz., 23c (18.4c). Contained No. 6 sweet peas. Graded Extra Standard (Grade B). Misbranded as to size. **3**

Solitaire Sifted Early, June, Medium Size (Distrib. The Morey Mercantile Co., Denver) 1 lb. 3 oz., 23c (19.4c). Contained No. 3 Alaska peas. Graded Extra Standard (Grade B). **3**

Stokely's Party Extra Small Early, Size 2 (Distrib. Stokely-Van Camp, Inc., Indianapolis) 1 lb. 1 oz., 20c (18.8c). Contained No. 3 Alaska peas. Graded Extra Standard (Grade B). Misbranded as to size. **3**

C. Not Recommended

Avondale Sweet (Distrib. The Kroger Co.) 1 lb. 4 oz., 14c (2 for 27c) (11.2c). Contained No. 6 and 7 sweet peas. Graded Standard (Grade C). **1**

Iona Sweet Large Size, Grade C (Distrib. The Great Atlantic & Pacific Tea Co.) 1 lb. 4 oz., 11c (2 for 21c) (8.8c). Contained No. 6 and 7 sweet peas. Graded Standard (Grade C). **1**

Kounty Kist Large Sweet Nearly Mature Mixed Sizes (Distrib. Minnesota Valley Canning Co.) 1 lb. 1 oz., 13c (2 for 25c) (12.2c). Seasoned with salt and sugar. Contained No. 7 sweet peas. Graded Standard (Grade C). Misbranded as to size. **1**

Kuner's Economy Sweet Nearly Mature (Kuner-Empson Co.) 1 lb. 4 oz., 17c (13.6c). Seasoned with sugar and salt. Contained No. 4 sweet peas. Graded Standard (Grade C). **1**

Natco Sifted Early June (Distrib. National Tea Co., Chicago) 1 lb. 4 oz., 15c (12c). Seasoned with sugar and salt. Contained No. 4 Alaska peas. Graded Standard (Grade C). **1**

Sword Sugar Peas (Packed by The Larsen Co.; Distrib. Household Products Co., Chicago) 1 lb. 4 oz., 15c (12c). Contained No. 4, 5, 6 sweet peas. Graded Standard (Grade C). **1**

April Showers, Medium Small Early (Distrib. Minnesota Valley Canning Co.) 1 lb., 15c (15c). Seasoned with sugar and salt. Contained No. 3 Alaska peas. Graded Standard (Grade C). **2**

Kewpie Early (Distrib. Mammoth Spring Canning Co., Sussex, Wis.) 1 lb. 4 oz., 21c (16.8c). Contained No. 4 Alaska peas. Graded Standard (Grade C). **2**

None-Such Mixed Sizes Early Sweet (Distrib. Sprague Warner; Division of Consolidated Grocers Corp.) 1 lb. 4 oz., 23c (18.4c). Contained No. 4 and 5 sweet peas. Graded Standard (Grade C). **3**

CORN

Cream Style, Golden

A. Recommended

Natco (Distrib. National Tea Co., Chicago) 1 lb. 4 oz., 19c (2 for 37c) (14.4c). Seasoned with sugar and salt. Graded Fancy (Grade A). **1**

Asco Fancy Sugar (Distrib. American Stores Co., Philadelphia) 1 lb. 4 oz., 19c (15.2c). Starch added. Graded Fancy (Grade A). **2**

B & M Sweet Paris Corn (Burnham & Morrill Co., Portland, Maine) 1 lb. 4 oz., 19c (15.2c). Starch added. Graded Fancy (Grade A). **2**

Country Home (Distrib. Regent Canfood Co., San Francisco) 1 lb. 4 oz., 19c (15.2c). Graded Fancy (Grade A). **2**

DelMonte Quality (California Packing Corp., San Francisco) 1 lb. 4 oz., 20c (16c). Seasoned with sugar and salt. Starch added. Graded Fancy (Grade A). **2**

Joan of Arc (Distrib. Illinois Canning Co., Hoopeston, Ill.) 1 lb., 16c (16c). Seasoned with sugar and salt. Starch added. Graded Fancy (Grade A). **2**

Kuner's (Kuner-Empson Co., Brighton, Colo.) 1 lb. 4 oz., 20c (16c). Seasoned with sugar and salt. Starch added. Graded Fancy (Grade A). **2**

Pictsweet (Pictsweet Foods Inc., Mt. Vernon, Wash.) 1 lb. 4 oz., 19c (15.2c). Starch added. Graded Fancy (Grade A). **2**

Spring Kist (Distrib. Eddington Canning Co., Inc., Springville, Utah) 1 lb. 4 oz., 19c (15.2c). Graded Fancy (Grade A). **2**

Hatchet (Distrib. The Twitchell-Champlin Co., Portland, Maine) 1 lb. 4 oz., 24c (19.2c). Starch added. Graded Fancy (Grade A). **3**

White Rose (Distrib. Seeman Bros., Inc., N.Y.C.) 1 lb. 4 oz., 23c (18.4c). Seasoned with sugar and salt. Graded Fancy (Grade A). **3**

B. Intermediate

Finast (Distrib. First National Stores, Inc., Somerville, Mass.) 1 lb. 4 oz., 17c (13.6c). Starch added. Graded Extra Standard (Grade B). **1**

Garden Patch (Distrib. Minnesota Valley Canning Co.) 1 lb. 1 oz., 15c (14c). Seasoned with sugar and salt. Starch added. Graded Extra Standard (Grade B). **1**

Iona Sweet Grade C (Distrib. The Great Atlantic & Pacific Tea Co.) 1 lb. 4 oz., 16c (12.8c). Starch added. Graded Extra Standard (Grade B). Misbranded as to Grade (not C but B). **1**

Lakeside Mello-Cream (The Lakeside Packing Co., Manitowoc, Wis.) 1 lb. 4 oz., 17c (13.6c). Seasoned with sugar and salt. Graded Extra Standard (Grade B). **1**

A & P Sweet Grade A (Distrib. The Great Atlantic & Pacific Tea Co., N.Y.C.) 1 lb. 4 oz., 19c (15.2c). Starch added. Graded Extra Standard (Grade B). Misbranded as to Grade. **2**

Honesty (Norfolk Packing Co., Norfolk, Nebr.) 1 lb. 4 oz., 19c (15.2c). Starch added. Graded Extra Standard (Grade B). **2**

Kroger (Distrib. The Kroger Co., Cincinnati) 1 lb. 4 oz., 19c (15.2c). One can graded Fancy (Grade A); one can graded Extra Standard (Grade B). **2**

BFC Sweet (Distrib. Roger Williams Wholesale Grocery Co., Providence, R. I.) 1 lb. 4 oz., 21c (16.8c). Starch added. Graded Extra Standard (Grade B). **3**

Del Maiz Sweet (Distrib. Minnesota Valley Canning Co., Le Sueur, Minn.) 1 lb. 1 oz., 19c (17.7c). Seasoned with sugar and salt. Starch added. Graded Extra Standard (Grade B). **3**

Friel's Sweet (S. E. W. Friel, Queenstown, Md.) 1 lb. 4 oz., 21c (16.8c). Graded Extra Standard (Grade B). **3**

Iowana (The Ames Canning Co., Ames, Iowa) 1 lb. 4 oz., 22c (17.6c). Starch added. Graded Extra Standard (Grade B). **3**

Iris (Distrib. Moffett Co., Flint, Mich.) 1 lb. 4 oz., 23c (18.4c). Starch added. Graded Extra Standard (Grade B). **3**

Milford (The Milford Canning Co., Milford, Ill.) 1 lb., 17c (17c). Seasoned with sugar and salt. Starch added. Graded Extra Standard (Grade B). **3**

Oak Hill (Distrib. E. C. Hall Co., Brockton, Mass.) 1 lb. 4 oz., 23c (18.4c). Starch added. Graded Extra Standard (Grade B). **3**

C. Not Recommended

Highway (Distrib. Regent Canfood Co.) 1 lb. 4 oz., 18c (2 for 35c) (14.4c). Starch added. Graded Substandard due to watery consistency. Slack filled. **1**

Preston (Distrib. Albert W. Sisk & Son, Preston, Md.) 1 lb. 4 oz., 17c (2 for 33c) (13.6c). Graded Substandard because of sulphide discoloration. **1**

Cream Style, White

A. Recommended

Honesty (Norfolk Packing Co., Norfolk, Nebr.) 1 lb. 4 oz., 20c (16c). Starch added. Graded Fancy (Grade A). **2**

Stokely's (Distrib. Stokely-Van Camp, Inc., Indianapolis) 1 lb. 4 oz., 19c (17.9c). Seasoned with sugar and salt. Graded Fancy (Grade A). **3**

B. Intermediate

J. J. (Distrib. Juillard-Cockcroft Corp., Watsonville, Calif.) 1 lb. 4 oz., 17c (13.6c). Starch added. Graded Extra Standard (Grade B). **1**

Otoe, Narrow Grain (Otoe Food Products Co., Nebraska City, Nebr.) 1 lb. 4 oz., 17c (13.6c). Seasoned with sugar. Starch added. Graded Extra Standard (Grade B). **1**

Farmers Pride Country Gentleman (Packed for Hulman & Co., Terre Haute) 1 lb. 4 oz., 21c (16.8c). Graded Extra Standard (Grade B). **3**

Milford (The Milford Canning Co., Milford, Ill.) 1 lb., 18c (18c). Seasoned with sugar and salt. Starch added. Graded Extra Standard (Grade B). **3**

Whole Grain, Golden

A. Recommended

Country Home (Distrib. Regent Canfood Co., San Francisco) 1 lb. 4 oz., 19c (21.7c). Graded Fancy (Grade A). **1**

Finast (Distrib. First National Stores, Inc., Somerville, Mass.) 1 lb. 4 oz., 18c (22.4c). Graded Fancy (Grade A). **1**

Stokely's (Distrib. Stokely-Van Camp, Inc., Indianapolis) 1 lb. 4 oz., 19c (22.5c). Graded Fancy (Grade A). **1**

Larsen's Freshlike Vacuum Packed (Distrib. The Larsen Co., Green Bay, Wis.) 14½ oz., 20c (2 for 39c) (25.6c). Graded Fancy (Grade A). **2**

Rose-Dale Vacuum Packed (Libby, McNeill & Libby, Chicago) 12 oz., 18c (2 for 35c) (24.5c). Drained weight, somewhat low. Graded Fancy (Grade A). **2**

White Rose Kernelettes (Distrib. Seeman Bros., Inc., N.Y.C.) 1 lb. 4 oz., 25c (29.6c). Seasoned with sugar and salt. Graded Fancy (Grade A). **3**

B. Intermediate

A & P Sweet Grade A (Distrib. The Great Atlantic & Pacific Tea Co., N.Y.C.) 1 lb. 4 oz., 19c (22.5c). Graded Extra Standard (Grade B). Misbranded. **1**

Kroger (Distrib. The Kroger Co., Cincinnati) 1 lb. 4 oz., 18c (2 for 35c) (21.3c). Graded Extra Standard (Grade B). **1**

Lakeside Tend'r Kernel (The Lakeside Packing Co., Manitowoc, Wis.) 1 lb. 4 oz., 17c (20c). Seasoned with sugar and salt. Graded Extra Standard (Grade B). **1**

Mary Dunbar Golden in Brine (Distrib. Jewel Food Stores, Chicago) 1 lb. 4 oz., 19c (21.7c). Graded Extra Standard (Grade B). **1**

Snider's Vita-Fresh Vaccum Packed (Distrib. Birds Eye-Snider, Inc., N.Y.C.) 12 oz., 16c (22.2c). Drained weight, low. Graded Extra Standard (Graded B). **1**

Defiance Sweet (Distrib. Associated Food Distributors, Inc., Coldwater, Mich.) 1 lb. 4 oz., 23c (26.3c). Graded Extra Standard (Grade B). **2**

Spring Kist (Distrib. Eddington Canning Co., Inc., Springville, Utah) 1 lb., 20c (26.6c). Graded Extra Standard (Grade B). **2**

Swing (D. Thompson Swing, Price, Md.) 1 lb. 4 oz., 23c (26.2c). Graded Extra Standard (Grade B). **2**

Kuner's Vacuum Packed (Packed by Kuner-Empson Co., Brighton, Colo.) Labeled 12 oz. AVD, 22c (28.6c). Seasoned with salt. Graded Extra Standard (Grade B). **3**

C. Not Recommended

Kroger (Distrib. The Kroger Co.) 1 lb. 4 oz., 18c (20.8c). Graded Substandard. Very mature corn. **1**

Natco (Distrib. National Tea Co., Chicago) 1 lb. 4 oz., 18c (2 for 35c) (21.4c). Graded Standard (Grade C). **1**

Hatchet (Distrib. The Twitchell-Champlin Co., Portland, Maine) 1 lb. 4 oz., 24c (27.4c). Graded Standard (Grade C). **3**

Whole Grain, White

A. Recommended

White Rose Kernelettes (Distrib. Seeman Bros., Inc., N.Y.C.) 1 lb. 4 oz., 23c (26.3c). Seasoned with sugar and salt. Graded Fancy (Grade A). **2**

B. Intermediate

Kroger (Distrib. The Kroger Co., Cincinnati) 1 lb. 4 oz., 20c (2 for 39c) (22.8c). Graded Extra Standard (Grade B). **1**

Monarch, White Silver Cross (Reid Murdoch, Chicago; Division of Consolidated Grocers Corp.) 1 lb. 4 oz., 23c (2 for 45c) (25.4c). Seasoned with sugar and salt. Graded Extra Standard (Grade B). **2**

Second Group of Mattresses

THE mattresses reported on include three innerspring units and a cotton felt mattress, which was tested for purposes of comparison. The test procedure used was similar to, but not exactly the same as on the mattresses reported on in the June 1947 BULLETIN. The specimens were placed on flat shelves in a testing machine designed and constructed by Consumers' Research and subjected to the wearing action of 200-lb. cleated rollers which moved back and forth over the mattresses (direction of motion parallel to the short edges of the mattresses). Mattresses were examined for points of failure after each 5000 complete rolling movements (forward and back) and were then turned over.

Before placing the mattresses on the machine, the amount each was compressed by the application of a 180-lb. weight distributed over an area of 5.5 sq. ft. (approximate projected area of an actual person) was measured to determine the mattress' relative softness as compared to others in the group. The mattresses were also laid on a level plane surface, in turn, and initial thickness measurements were made at three places on each side and two places on each end. Compression and thickness measurements were made in this same manner after 25,000 and 50,000 complete strokes of the rollers, and at the end of the test.

One mattress, the *Karpen Everest*, had deteriorated so badly that it was removed from the test at 50,000 cycles; the test on the others was carried on to 70,000 complete cycles. The mattresses were then opened, spring and cover constructions were noted, and each was checked carefully for brok-

en springs and for cover wear.

Judgments as to probable durability of the covers were based on amount and character of wear produced during the test.

Ratings are cr48.

A. Recommended

Spring Air (Hyde Park Bedding & Mfg. Co., Reading, Pa.) $49.50. Prebuilt border. Jacquard woven ticking, predominantly blue. Cord handles. Tufting of button and cord type (less desirable than button and tape). Moderately soft. Weight, 70 lb., would make mattress hard to handle for many persons (but note that the higher grade mattresses tend to be heavy). Eight ventilating eyelets at points of attachment of handles. Spring unit consisted of black-coated hourglass-shaped coil springs in lengthwise rows, in which a row of right-hand springs was alternated with a row of left-hand springs; helical spring stays fastened crosswise rows of springs together closely; unit was reinforced with helical spring around its outer edges, through which ran a wire. This mattress showed no signs of wear at end of test; both cover and springs were in good condition, and the mattress showed no appreciable loss of ability to return to its original thickness after application and removal of a load. Measurements showed that it was somewhat thinner (about 6%). **2**

B. Intermediate

Ostermoor Original Style Felt (Ostermoor & Co., Inc., 348 George St., Bridgeport, Conn.) $48. A layer-built felt mattress with gray and white striped ticking. Strap handles. Tufts and cord tufting. Moderately soft but had much less ability to come back to its original thickness after application and removal of a load (resilience) than innerspring mattresses. Weight, 64 lb. There were no visible signs of wear at end of test, but mattress had become about 13% thinner, with resultant "harder" feeling to the touch. A good choice for those desiring a mattress of layer-built felt type, but had the fault inherent in all felt mattresses in that areas of it which received most use became thinner; instructions for the care of this mattress indicate that regular attention by the housewife is required to prevent hollows forming in use. **2**

Slumberon (Burton-Dixie Corp., 960 Franklin Ave., Brooklyn 25, N.Y.) $49.50. Prebuilt border with roll. Striped ticking, predominantly blue. Cord handles. Tufting, buttons and cord. Relatively soft. Weight, 65 lb. Two brass screen ventilators in each long side of border. Spring unit consisted of rows of hourglass shaped right-hand springs joined with helical spring stays; the unit was reinforced at the outer edges with a helical spring through which ran a heavy wire. Cover was in good condition, and there were no broken springs at end of test, but the padding had become slightly uneven, 1 button had come off, and mattress showed appreciable loss of ability to return to its original thickness after application and removal of a load. **2**

C. Not Recommended

Karpen Everest (S. Karpen & Bros., Chicago) $39.50. Prebuilt border. Cover, blue, with wide multicolored stripes. Strap handles. Tufting, button and cord. Relatively soft. Weight, 48 lb. Eight perforated disk ventilators. Spring unit consisted of rows of hourglass shaped right-hand coil springs joined together lengthwise with helical springs; unit was reinforced at the edges with a helical spring through which ran a strand of heavy wire. The padding over springs had separated near one end, at 10,000 cycles. At 50,000 cycles, two springs had penetrated the cover and the mattress had become lumpy and uneven. When removed from test and opened, 16 broken springs were found. **1**

New Book on Hearing Problems

Reviewed by Percival Wilde

HEARING AND DEAFNESS, A Guide for Laymen. Edited by Hallowell Davis, M.D. xv+496 pp. Murray Hill Books, Inc., New York (232 Madison Ave.), and Toronto, $5.

HERE, at last, is an objective and authoritative non-technical work dealing comprehensively with hearing, hearing loss, and the allied topics. Dr. Davis, who is Director of Research of the Central Institute for the Deaf, and who recently edited a summary of the research conducted at Harvard University for the Army and Navy, now contributes chapters on "Audiology," "Physics and Psychology of Hearing," "Anatomy and Physiology of the Ear," "Tests of Hearing," and "Hearing Aids." The professors of otolaryngology of College of Physicians & Surgeons of Columbia University, Washington University Medical School, and Yale Medical School, contribute other chapters, one of which deals at length with the much-discussed "fenestration" operation. Problems of rehabilitation and education, and their social and economic implications are considered by the Field Director of the American Hearing Society, the Director of the School for Speech at Northwestern University, the Supervisor of Training at the U.S. Naval Hearing and Speech Clinic, and others of comparable standing. Dr. S. R. Silverman, Director of the Central Institute for the Deaf, and S. G. Taylor, lectur-

er at New York University, supply an invaluable chapter on "The Choice and Use of Hearing Aids." Dr. Silverman is the author of further chapters dealing with hard-of-hearing and deaf children.

There are many authors, for, as the foreword points out, "No one person knows all the answers"; but the answers most important to CR subscribers may be summed up thus:

1. Operative interference: "We are still unable to come to positive conclusions as to the long-term permanence of the improvement of hearing." (p. 121)

2. Aids in general: "No hearing aid can ever compensate completely for a hearing loss." (p. 196)

3. Aid selection: " 'Individual fitting,' based on an analysis of the audiogram . . . is a survival from the days of feeble amplifiers and sharply resonant receivers and microphones.... 'Fitting' a hearing aid does not work out in practice." (p. 206-208)

A three-page "troubleshooting chart" should abolish weeks of annoyance for hearing aid users whose homes are distant from service stations.

There is an excellent index.

1948 Automobiles

Editor's Note:

THIS is the first of a series of reports on the 1948 automobiles. Each month as many individual cars as possible will be reported until all the more important models of cars have been covered. At that time comparative ratings in tabular form will be issued. The ratings which are being assigned the cars reported upon in the several articles must be regarded as tentative and subject to change when fuller data are in and have been studied and checked. This report is not based on exhaustive tests, but on the opinions of several qualified automotive engineers.

The Gray Market

Many of the makes of cars to be listed in this and following BULLETINS will not be available even from authorized dealers for prompt delivery at or near the delivered New York City prices given, but in many cases they will be made available promptly at so-called "gray market prices," which will be from $400 to $700 above the delivered list prices. The effect of this "gray market," which is likely to be with us for several more years, is not generally understood by the general public. If a prospective buyer goes to an authorized dealer, he is likely to be told that his name will be placed on the list and delivery will be in 15 to 20 months. In some cases, if he insists he cannot wait that long, he may be offered a car equipped with almost all available accessories for prompt delivery at the "gray market" price. Those makes of cars for which a definite "gray market" seems to exist among independent dealers, "used car" dealers, etc., will be indicated in the final summary table, and the approximate prices which must be paid in order to obtain reasonably prompt delivery will be shown therein.

Price Group 1

A

Plymouth DeLuxe. $1214 f.o.b.; $1398 delivered N.Y.C. Engine: 6 cylinder, L head, 3¼ in. bore x 4⅜ in. stroke, 217.8 cu. in. displacement; 95 hp. at 3600 rpm.; taxable hp., 25.35; compression ratio, 6.8 to 1. Engine oil capacity, 5 qt.; cooling water, 15 qt. · Gear ratio, 3.9 to 1. Battery, 15-plate 95-ampere-hour, which is somewhat small for cold climate use. *Sizaire* type independent front wheel suspension, with sway eliminator for better control on turns. Wheelbase, 117 in.; overall length, 197 in. Tire size, 6.70 x 15 (overloaded). Braking area, 158 sq. in.; brake factor, 40. Road clearance, 7½ in. Some trouble reported in shifting to and from reverse. Excessive bushing and shackle wear reported in heavy driving service. 17-gal. gas tank. Reported performance 20 to 22 m.p.g. in country driving. As 1948 models differ only slightly from 1947, a relatively high depreciation loss (decline in "book value") can eventually be expected on the 1948 car. Hand brake, suited only for parking, and located on drive

shaft, had only 33 sq. in. of braking area. With this type of brake it is necessary to block front wheels securely before jacking up a rear wheel. Extra corrosion-preventive and sound-deadening undercoating, except for fenders, not recommended for this car, as it may tend to interfere with repairs and adjustment, unless done most carefully by experts. Seat widths, 52 in. front, 51 in. rear. Cushions are rather hard. Bumpers somewhat light, without "wrap-around," and do not provide full protection. Judged a good family car, but not considered sturdy or tough enough for high-speed, heavy-duty service. Weight, 3233 lb. (price per lb., [based on N.Y.C. delivered price] 43.3c).

Plymouth Super-DeLuxe. $1289 f.o.b.; $1468 delivered N.Y.C. Essentially the same as *DeLuxe* model, but has some minor refinements.

B

Nash 600. $1404 f.o.b.; $1488 delivered N.Y.C. Engine: 6 cylinder, L head, 3⅛ in. bore x 3¾ in. stroke; 172.6 cu. in. displacement; 82 hp. at 3800 rpm.; taxable hp., 23.44; compression ratio, 7.1 to 1 (can use standard, but better performance with premium fuel); and 3-ring pistons not well suited to high compression pressures. Engine oil capacity, 5 qt.; cooling water, 14 qt.; closed pressure system. 13-plate 90-amp.-hr. battery (small, for cold climate use). *Sizaire* type independent front wheel suspension. Two-way shock absorbers and coil springs at rear which, because of livelier action than conventional leaf springs, may tend to be more fatiguing to passengers, if shock absorbers not kept in first-class condition. Wheelbase, 112 in.; over-all length, 200 in.; road clearance, 8 in. Tire size, 6.40 x 15 (overloaded). Braking area, 113.6 sq. in.; brake factor, 31. Unit body-frame of all welded construction which should eliminate rattles and noise found in pre-war *Nash.* 20-gal. gas tank. Performance reported by owners, 23 to 25 m.p.g.; dealers claim 30 m.p.g. with overdrive. Seat widths, 58 in. front, 50 in. rear. Front bumper of good design, but rear bumper in 3 sections (due to present steel shortages) and does not seem to be as stiff or rigid as front bumper. Rear window of *Herculite* glass — undesirable — as this type of glass tends to become fragmented if scratched and struck a mild blow. The car will likely burn oil if used in high-speed, hard-driving service. Weight, 2940 lb. (price per lb., 51c).

Price Group 2

B

Studebaker Champion De Luxe, $1546 f.o.b., $1604 delivered; *Regal De Luxe,* $1620 f.o.b., $1677 delivered N.Y.C.; loaded with full accessories, $1900. Engine: 6 cylinder, L head, 3-in. bore x 4-in. stroke; 170 cu. in. displacement; 80 hp. at 4000 rpm.; taxable hp , 21 6; compression ratio, 6.5 to 1 (7.0 to 1.0 optional — the higher ratio is not recommended by CR). Engine oil capacity, 5 qt.; cooling water, 10 qt. Equipped with *Framm* removable cartridge type oil filter which must be changed every 4000 to 8000 miles. Gear ratio, 4.1 to 1; with overdrive, 4.56/3.19 to 1. Battery, 15-plate, 100 amp.-hr., which should be ample unless loaded with a number of power-consuming accessories such as radio, heater, etc. Engine compact, but not readily accessible for repairs and adjustments, whence repair cost may average much higher than for conventional engine work. (CR considers that the car should preferably be serviced only by authorized *Studebaker* service stations.) Automatic choke requires adjustment for winter and summer driving and is judged to be, as automatic chokes often are, a likely source of trouble. *Delage* independent type front wheel suspension. Wheelbase, 112 in.; over-all length, 191 in. Tire size, 15 x 5.50 (not adequate). Rear tires and wheels somewhat difficult to remove, due to shape of fenders. Use of bumper jack essential to give sufficient clearance (jack supplied with car of little value and judged dangerous to use). Brake area, 148 sq. in.; brake factor, 41; cable-type hand brakes, which may lock in freezing weather. Clearance, about 8 in.; exhaust pipe exposed below frame, which would make car poorly suited to driving on rough country roads or over steep ramps; also danger of curb damage when parking. Due to light metal used and corrosive salt conditions often encountered, undercoating of chassis considered essential. Driving vision very good, but windshield posts and side posts (based on examination of actual roll-over photographs of cars after accidents) seem to be too light for best protection of occupants against injury or death under crash conditions. A small car but seats three average-size persons in both front and rear; tall persons, however, may find seat height too low, and middle person in front lacks foot room. Reported performance 22 to 24 m.p.g., 27 with overdrive. 17-gal. gas tank. Oil consumption likely to be high after 25,000 to 30,000 miles, and much sooner if car is used for high speed hard driving, owing to piston and ring design. Judged a satisfactory car for light family use, but design and construction do not indicate proper reserve of strength and durability for resisting impact of crash-type accidents, or for a user driving car at high speeds or under hard driving conditions. Weights: *De Luxe,* 2860 lb.; *Regal De Luxe,* 2865 lb. (price per lb.: *De Luxe,* 56c; *Regal De Luxe,* 58.5c).

Price Group 3

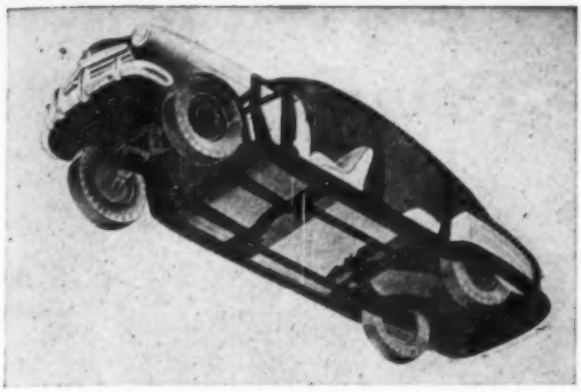
B

Studebaker Commander DeLuxe. $1851 f.o.b.; $1920 delivered N.Y.C. *Regal DeLuxe,* $1972 f.o.b.; $2041 delivered N.Y.C. Engine: 6 cylinder, L head, 3-5/16 in. bore x 4⅜ in. stroke, 226 cu. in. displacement; 94 hp. at 3600 rpm.; taxable hp., 26.35. Engine oil capacity, 6 qt.; cooling water, 13 qt. Gear ratio, 4.09 to 1 or 4.55/3.18 to 1 with overdrive. Tires 6.50 x 15 (overloaded). Except for more powerful engine and 7-in. longer wheelbase, essentially the same as *Studebaker Champion.* Weight: *DeLuxe,* 3367 lb.; *Regal DeLuxe,* 3387 lb. (price per lb.: *DeLuxe,* 57c; *Regal DeLuxe,* 60c).

Price Group 4

B

Hudson 8. Super, $2092 f.o.b., $2245 delivered N.Y.C.; *Commodore,* $2250 f.o.b., $2408 delivered N.Y.C. Engine: 8 cylinder, 3-in. bore x 4½-in. stroke; 254 cu. in. displacement; 128 hp. at 4200 rpm.; taxable hp., 28.8; compression ratio, 6.5 to 1. Engine oil capacity, 9 qt.; cooling water, 17 qt. Although rated at 7 hp. more than the 6-cylinder engine, the 8 is the smaller in piston



View showing *Hudson* frame design

displacement. Theoretically the 6-cylinder engine would seem preferable to the 8 for most owners; on the other hand, the "six" is a new and relatively untried engine, whereas the "eight" is much the same as the engine previously used. Reported performance about the same as for *Hudson 6*. Except for engine, this car is the same as the *Hudson 6*, and in the main comments on that model apply. Weight: *Super*, 3705 lb.; *Commodore*, 3780 lb. (price per lb., 61c and 64c respectively).

B–

Hudson 6. *Super*, $2003 f.o.b., $2140 delivered N.Y.C.; *Commodore*, $2161 f.o.b., $2316 delivered N.Y.C. Engine: 6 cylinder, L head, 3-9/16-in. bore x 4⅜-in. stroke, 262 cu. in. displacement; 121 hp. at 4000 rpm.; taxable hp., 30.4; compression ratio, 6.5 to 1. Engine oil capacity, 7½ qt.; cooling water, 17 qt. Equipped with *Purolator* type of oil filter with replaceable cartridge. Gear ratio, 4.1 to 1 (4.56 or 4.3 to 1 optional). 17-plate 120-amp.-hr. battery (adequate). Engine placed very low, and servicing is rather difficult. A frame cross member must be removed to get at crankcase. Has automatic choke, which is judged to be a likely source of trouble. *Sizaire* type independent front wheel suspension with sway bars front and rear. Wheelbase, 124 in.; over-all length, 207½ in. Tire size, 15 x 7.10, 24 lb. inflation pressure (overloaded). 15 x 7.60 optional (slightly overloaded). Braking area, 158.2 sq. in.; brake factor, 36 (low). Unit frame and chassis of new and radical design; road clearance about 8 in., but muffler pipe kept within frame and cross members and thus not liable to road damage in rough country as on some cars. Uses box frame, which extends outside the rear wheels, making possible and practicable the use of side bumpers, which are much needed on all cars to prevent fender and side-crash damage. Changing of rear tires will be difficult; recognizing this, manufacturer has provided 4 box-type jack-pads located on body frame members, which should permit car to be jacked high enough to remove wheel with reduced danger of car slipping off jack. Some scrape damage may occur when car is parked against high curbs. Seats are wide, 63 in. to 64 in., and inside height ample even for tall persons, but windows are only ⅔ to ½ the height of those on some other cars, greatly limiting range of vision vertically. Reported performance, 18 miles per gallon in reasonably flat or slightly hilly country; with overdrive, 22 miles per gallon. Piston and ring design good; should be economical in use of oil. Automatic clutch and shift available as optional extra equipment, and consists of vacuum-operated power cylinders actuating the standard clutch and transmission. Overdrive available as an extra, at $90. The desirable combination hydraulic and mechanical reserve brakes are continued, but emergency brake cables are exposed under the chassis — not protected, and therefore liable to locking in freezing weather. Although this car has advantageous features, and seems to be a good one, the large number of radical design changes that have been made, coupled with the fact that this make has had a relatively low turn-in value, would indicate the rating should be *B–*, until sufficient time has elapsed for the car to have fully proven itself in actual service (assuming that the make is not again drastically modified in bringing out the next year's model). Weight: *Super*, 3680 lb.; *Commodore*, 3720 lb. (price per lb., 58c and 62c respectively).

Kaiser. $2184 f.o.b.; $2278 delivered N.Y.C. Engine: 6 cylinder, L head, 3-5/16 in. bore x 4⅜ in. stroke, 226 cu. in. displacement; 100 hp. at 3600 rpm.; taxable hp., 26.3; compression ratio 6.86 to 1, but manufacturer has recently announced a ratio of 7.3 to 1. Battery, 15-plate 100- or 105-amp.-hr. capacity (somewhat low). Judged to be a typical compact power plant and should be reliable. Engine oil capacity, 5 qt.; cooling water, 15 qt. Engine placed very low in chassis, making adjustment of valves somewhat difficult. *Sizaire* type independent front wheel suspension with sway bars front and rear. Wheelbase, 123½ in.; over-all length, 203 in. Tire size, 7.10 x 15, 24 lb. inflation pressure (overloaded). Braking area, 175.7 sq. in.; brake factor, 40. Road clearance, 8¾ in. Rear fender skirt comes very close to tire sidewall, leaving only minimum room for tire chains (undesirable). Seats are wide; front, 62 in.; rear, 62.5 in. Reported performance by owners, 20 to 25 m.p.g. for country driving with 6.86 to 1 compression ratio. It is considered that oil burning is likely to be evident at about 40,000 miles, depending upon type of driving, particularly in cars with the newly offered high compression ratio. Hand brake of cable type, acting on rear wheels only and liable to locking that sometimes occurs in freezing weather. Considerable steering wheel vibration on rough ground, and shimmy, due mostly to unbalance of wheels. Finish was "patchy" and at this time must be rated poor. Car had "tinny" sound in driving which is usually associated with construction tending to development of rattling noises as car ages. Open market trade-in values on 1947 models are poor (50 to 60% of new car value; most popular makes will bring their original purchase price or even considerably more). Weight, 3645 lb. (price per lb., 62.5c).

Price Group 5

B–

Frazer. $2374 f.o.b.; $2478 delivered N.Y.C. This car is merely a de luxe model of the *Kaiser*, with same mechanisms and a little better upholstery. Overdrive available at $80 extra. Brake area, 175.7 sq. in.; brake factor, 40. Weight, 3690 (price per lb., 67c).

Electric Hedge Trimmers

THE home owner with a large stretch of hedge will find an electric hedge trimmer a handy tool and a great saver of time and hard work. Hedge trimmers are, however, potentially dangerous, especially where the possibility of their use by children is involved, for the cutting blades are not guarded, and the tool should, therefore, be used and stored with extreme care to prevent accident. Under no circumstances permit a child to use or play with the appliance. Some electric hedge trimmers cannot be expected to cut the heavy twigs of old hardened hedges, using the full length of the blade, without slowing down considerably, but by limiting the cutting to only a small portion of the blade (4 or 5 inches), such hedges can be satisfactorily trimmed.

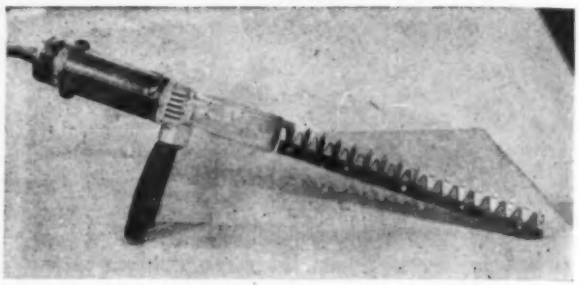
The extension cord used should be of rubber-covered wire of fairly heavy gauge (at least No. 14 or 16). Too light a gauge of wire or an overlong connecting cord will result in a serious drop in voltage at the motor, reducing its power, and could result in a burn-out of the motor. Extension wire should be inspected frequently, and if damaged or in poor condition, it should be replaced immediately, for any defective wiring out of doors involves a special hazard to life.

In the following listings, the actual wattages under no-load operation are given in parentheses following the rated watts. (Underload wattages were somewhat higher.) On-off switch was well located for convenience unless otherwise noted. All motors were ac-dc.

A. Recommended

Skil trimmer, Model 66 (Skilsaw Inc., 5033 Elston Ave., Chicago 30) $39.95. Weight, about 6½ lb. Blade, 12 in. Rated watts, not stated (125). Fairly easy to handle and operate, and cut very well on light hedge. Vibration, moderate. **3**

Sunbeam, Model A1 (Sunbeam Corp., 5600 W. Roosevelt Rd., Chicago 50) $37.50. Weight, 4¾ lb. Blade, 12 in. long. Body and housing of plastic and light alloy metal. Rated watts, 65 (69). Very easy to handle and operate, and cut very well on light hedge. Vibration, slight. **3**



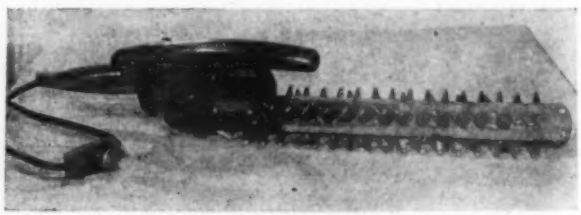
Sunbeam, Model A1

B. Intermediate

Hedgshear, Type HT (Porter Cable Machine Co., 1714 N. Salina St., Syracuse) $39.95. Weight, 6¾ lb.

Hedge-Klip, Model HK 47

Blade of chain type running in one direction instead of oscillating back and forth, provided two cutting surfaces, each about 14 in. long, so that machine could be used to cut either way, toward left or right. Tip of blade support extended about 1½ in. beyond cutting knives. This inactive section tended to catch in the uncut part of the hedge, making it somewhat difficult to guide the blade evenly over the hedge. Rated watts,



Hedgshear, Type HT

not stated (265). Vibration, moderate, but appliance very noisy in operation. Switch inconveniently located, in cord. Cut well on both light and heavy hedge. **2**

Hedge-Klip, Model HK 47 (Accmatool Co., Inc., 102 W. 101, New York 25) $44.50. Weight, 8 lb. Blade, 14½ in. Rated watts, not stated (76). Somewhat tiring to operate because of weight; vibration greater than with *Sunbeam*, but not too objectionable. Cut

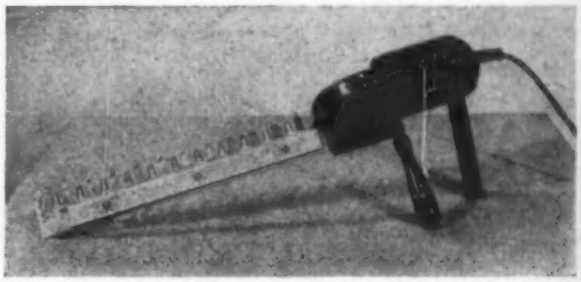
well on both light and heavy hedge. Failed proof-voltage test; otherwise would have been rated *A. Recommended.* **3**

C. Not Recommended

Wards (Montgomery Ward's Cat. No. 84—7742) $10.95, plus postage. Weight, 2¾ lb. Similar in principle to the rotary flat-knife type of lawn mower, with a double-edged rotary blade about 6¼ in. long which revolves at high speed. Rated watts, not stated (48). Did a very poor job of cutting and judged potentially quite dangerous because of partially unguarded blade, to user. **2**

Wards, Cat. No. 84—7742

Pincor, Model P 17 (Pioneer Gen-E-Motor Corp., Chicago) $32.50. Weight, 6¾ lb. Blade, 13 in. long. Blade cut from left to right (judged to be unhandy for any but a left-handed person). Rated watts, not stated (126). Housing, of light die cast material, not considered durable and likely to be expensive to replace. Vibration, objectionable. Cut only fairly well. **2**

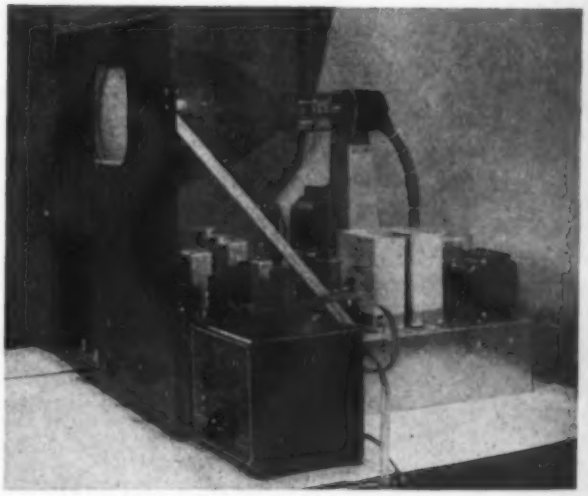


Pincor, Model P 17

The Present Television Boom

IN the past year television has taken a tremendous upturn. Certain events which have been televised seemed to give the public a taste of a new dish which they considered delectable. Thus a great and definite public demand for television exists. As a consequence, broadcasters and television receiver manufacturers, who had been stalling heretofore, knew where they stood. Before this time, broadcasters who had filed applications for television broadcast stations deferred construction as long as possible to avoid the expensive programming that would be required in the face of the small apparent possibilities of obtaining a return on their large investment. Receiver manufacturers were likewise skeptical, and most of them concentrated their production on standard-band radio receivers.

In the space of just a few months, the situation changed, with a sudden impact. The public had discovered television and let it be known that it was prepared to pay the bill. This turning point was probably stimulated by the televising of the World Series baseball games, the Army-Navy football game, the heavyweight fights, and other events. On the average, the programs were rather poor, but the presentation of these outstanding events, televised in a satisfactory manner, was sufficient to prove to the public that television was something it wanted.



The broadcaster and advertisers soon heard the demand, and in a very few months there was a tremendous stimulation of activity in the design and construction of television receivers and in the filing of applications for television channel assignments.

Receiver manufacturers, upon hearing the call, hurried to provide low-priced receivers which could be produced in large quantities. Sharp competition is already developing in the low-priced field since it is realized that the large volume production will be in this range. New circuit developments have appeared which make possible receivers with a re-

duced number of tubes, so that the cost may be made lower than hitherto. The older circuits have likewise been investigated continuously by engineering experts in an attempt to provide lower-priced receivers.

The Public's Position

Although television has been "here" for a considerable length of time, it has certain laboratory aspects which cannot be fully resolved until the public has had time to try out receivers in large numbers. At present, many different types of television receivers are being offered. New ideas, many of which are stimulated by customer acclaim or complaints, are being quickly incorporated into new models, and obsolescence is proceeding at a rather rapid rate. The situation calls for a bit of general study to avoid at least some of the obvious pitfalls which are appearing. Tuning arrangements and various types of circuits have certain general advantages and disadvantages which may be pointed out at this time.

Picture Area

Picture areas from that equivalent to a standard movie screen down to a 5-inch diameter direct-viewing tube are being offered. The larger sizes, obtained by image-projection systems, or extremely large direct-viewing tubes, are being offered at prices which are definitely at luxury levels. Picture sizes smaller than given by a 7-inch tube are rather impractical, and may be so small that the total investment is somewhat bottlenecked by the poor results obtained at the picture tube.

Television Sets with the 7-Inch Tubes

At present many low-priced receivers are appearing that use a 7-inch tube. The main disadvantage of this tube is the lack of available light brilliance, so that the room must be darkened for satisfactory observation. At night, when the eyes have become accustomed to lower light levels, and all near-by lights are extinguished, the brilliance is perfectly satisfactory. However, in the daytime, the eye is normally adjusted for a higher light intensity, which, together with a large amount of distracting illumination usually present in the daytime, makes observation difficult. The reason for this lower light level is that these smaller tubes use a lower voltage (2500 volts) to accelerate the electrons impinging upon the fluorescent screen to create the light impulse. The more brilliant tubes, such as the 10-inch, use voltages from 6000 on up.

In spite of the lower brilliance of the 7-inch tube, it must be remembered that this tube size makes possible a cheaper television receiver (approximately $150 cheaper). Furthermore, quite good and enjoyable television reception may be obtained with the 7-inch tube size, for since most television reception is at night, the main disadvantage of the tube is only occasionally evident. The fact that the picture size is small on the 7-inch tube is considered a minor fault, for satisfactory detail is obtained, and the only time the disadvantage of the small tube becomes evident is when a large number of people attempt to view the picture at the same time. The normal viewing distance for a 7-inch tube is from 1½ to 2½ feet. This means that three or four people can view the screen comfortably, and if more are to be accommodated, they see the picture as though they were in the back seats of the ordinary theater.

Receivers with the 10-Inch Tubes

For those who are prepared to pay more than the $170 or so asked for the 7-inch tube sets (less antenna and installation), the 10-inch tube is a good compromise at the present time. Choice of this size may be regarded as a protection of the rather substantial investment that must be made in buying a television receiver of good size. Not only does this size provide more brilliance, but the number of people which may view it comfortably is multiplied several times as compared to the 7-inch tube. It is interesting to note that, at the recent Television Institute exhibition, very few television receivers were demonstrated with a screen size less than that provided by the 10-inch tube. The 10-inch tube in this case provided sufficient brilliance and a wide enough viewing angle so that the public could view in passing with the light in the room only slightly subdued.

Manufacturers have found a rather thriving business in exchanging sets with 7-inch tubes for new 10-inch models. Many manufacturers, upon hearing this, have shied away from manufacturing models with 7-inch tubes.

The normal viewing distance of the 10-inch tube is from 2 to 3½ feet. This viewing distance will accommodate four to six people comfortably.

Large-Size Screens

The large-size screens, provided by large picture tubes and by projection arrangements are usually as expensive as the ordinary automobile, and are definitely de luxe or *Cadillac* quality. Satisfactory reception may be obtained with a medium-priced 10-inch tube, and it is true that the larger-size television receivers command their high price largely because of decorative features, such as large cabinet and pleasing ornamentation, as well as because of the large-size tube screen.

The available projection-type systems appear to be somewhat deficient in brilliance as compared to an equivalent size in a direct-viewing picture tube. The optical system required in projection systems

absorbs or loses a certain portion of the light available from the cathode-ray tube. Therefore, at present any projection system must generate a larger amount of light on the screen of the cathode-ray tube before it can equal a direct-viewing system. This situation places a handicap on the projection system which has not yet been overcome. Certain projection systems are showing promise, and the best available at the present time is quite satisfactory—if the price is acceptable—but there is still much to be done to complete the development of projection television.

Dial Arrangement

The industry is doing a certain amount of feeling around to determine what controls should be placed on the front of the receiver. The ordinary television receiver has an almost excessive number of controls. To place them all on the front of the receiver would have a frightening effect on the ordinary layman. As certain of the adjustments remain fixed or are only made occasionally, controls for these are being placed on the back of the set so that they may be reached only with extra effort. Just how many of the controls should be placed on the front of the set, seems to vary according to the opinions of each manufacturer. At present it is felt that the following controls should be on the front.

1. *Contrast Control.* This must be adjusted for different signal strength as the station selector is changed from one station to another. It also may require an occasional change for different scenes which are being televised.

2. *The Brilliance, Background, or Brightness Control.* This control has different adjustments for individual preference and different scenes. It is also adjusted to suit the particular condition of light level in the room at the time.

3. *Synchronizing Control.* Many receivers are available at present with the synchronizing controls on the back. In cases where the synchronizing system is stable, this is perfectly satisfactory. However, in other cases, the instability of the synchronizing circuits requires an easily available adjusting means to keep the picture stable with the image placed on the air by the transmitting station. Many different synchronizing circuits are now available, so that each case requires an individual appraisal.

4. *Station Selector.* Two types of station selectors are being provided. In one of these, continuous tuning is provided in the manner of the ordinary radio tuning dial. This type is difficult for the layman to handle. Confusion is brought about when a detuned condition is obtained, which allows the picture channel to be heard as confused and unintelligible sounds on the loud-speaker. Furthermore, the tuning procedure required is slow and cumbersome so that quick switching from one channel to another is difficult. This is noticeable when one may want to switch to another channel during a commercial or between the rounds of a fight.

The other type of tuning selector is the switch or push-button arrangement. In this system no technical skill is required. Certain of these systems have an additional vernier adjustment which is not too satisfactory, since its use calls for some skill. The new "intercarrier" circuits and some others which provide automatic tuning controls are the ultimate in simplicity, since only the pushing of a button or its equivalent is required to change reception from one channel to another.

Installation Service

Most manufacturers have adopted a policy of making a fixed charge for antenna installation, which includes a year of free service. In the present early stage of television, such a service is regarded as a worth-while investment for the customer. Not only does the antenna installation require specialized technical service, but many of the early television receivers are encountering service difficulties of one kind or another, that are more or less unavoidable. However, in contracting for this service, consumers should inquire about the promptness with which a service call may be attended to, since it is reported that after the first installation has been made, it is difficult to obtain service that may be needed.

* * *

The following represent tentative judgements of some of the receivers examined at the Television Institute held in New York City during April. The best receivers of the non-projecting type seem to be those made by RCA, DuMont, and Philco. Farnsworth offered a receiver with a special circuit providing a high degree of automatic volume control so that in switching from one station to another the picture-tube controls did not require adjustment. This is a good feature, but it is not considered that it is worth very much extra cost in actual viewing. A certain amount of adjustment of the picture-tube controls is required to suit the individual.

Of projection television receivers, the *RCA* system appeared to be superior to the others examined. While the light intensity afforded was not quite up to that of the direct-viewed tubes, it was satisfactory. The picture quality was excellent.

The *Philco* projection system makes a sales point of a special screen claimed to give a high light efficiency, but the impression gained was that the graininess of the screen impaired the detail so that the image had a diffused and fuzzy appearance. It was also felt that the pattern of light from this screen was directional to an extent that one had to

be directly in front of it in order to obtain the benefits of the higher reflection efficiency.

In general, picture quality on projection systems was satisfactory, but for sets with the larger screens, special viewing booths were provided to lower the brilliance of the light received from the surrounding area. (This was necessary because of the loss of brightness engendered by spreading the available amount of light over a large screen.)

The general impression was that too little attention was paid to providing proper antennas and to obtaining a good tuning adjustment. Many of the demonstrators were using antennas which they admitted were inefficient, and interference effects were in evidence as a result. It is clear that the consumer who uses a television set cannot go to too much trouble to be sure that his antenna and its installation are right.

Experts have expressed the following views regarding picture quality, etc., at the present state of the television art.

1. The brilliance level of all television receiving systems is too low. This is very noticeable in comparison with the ordinary 16-millimeter movie system.

2. Limitations on the power of television broadcasting imposed by the Federal Communications Commission are providing signal strength which is inadequate to combat the various kinds of interference encountered. Interference from ignition and oscillator radiation of television receivers is rather extreme at times, and this would be greatly reduced if the transmitting stations were allowed to use as much as 10 times the amount of power which they presently broadcast.

Abridged Cumulative Index of Previous 1948 Issues Consumers' Research Bulletin

	Month and Page
Allergy, chronic food, effect on children	May, 3
Amplifiers, audio†	Feb., 14-16; Mar., 15
Anti-freeze solutions†	Jan., 22-23
Appliances, new, household, faulty inspection	June, 3
increased supply	Apr., 29
Arsenic and lead in foods	May, 11-12
Aspirin, caution in use	Feb., 29
Athlete's foot	Apr., 3-4
Automobiles, announcement re 1948	June, 22
Bicycles†	June, 5-7
Binders for CR's Bulletins	June, 24
Bulletins, experiment station and technical, useful to CR	Feb., 6
Camera, plate and film-pack†	Feb., 21
Cameras, foreign-made, discussion†	Mar., 29
miniature†	May, 23-24
motion picture†	Feb., 18
twin-lens reflex†	May, 23
Cars, used, question of trading in†	Feb., 7-8
Cleaner, household†	May, 30
jewelry and eyeglass†	May, 30
Cleaners and detergents, soapless†	Mar., 25-27
Clothes driers†	June, 20-21
fee, soluble†	June, 30
Corrections and emendations†	Jan., 13; Feb., 17; May, 10
Correspondence, subscribers', in writing to CR	Mar., 34
Cosmetics, wartime luxury tax, affect on sales	June, 3-4
Deodorizers, vapor-disseminating	May, 4
Dishwashing machines, three automatic, final report†	Mar., 23-24
portable†	Feb., 9-10
Editorial	each issue, page 2
Exposure guide, photographic†	Mar., 22
Fire alarm device†	Jan., 26
Floor polisher†	Jan., 11
Floor-polishing attachments, vacuum cleaner†	Feb., 13
Flour, poisonous chemical in processing	Mar., 19-21
Food preparation, modern factory, reasons for caution	Apr., 25-26
Fuel oil, pretreating liquid†	Apr., 24
Gasoline, automobile†	Apr., 18-19
Gloves, men's leather†	Jan., 5-8
Hair tonics, ineffective†	Jan., 14-16
Honey, prices	May, 4
Inks†	Mar., 30-32
Iodine, cause of acne	May, 3-4
Ironing machines, electric†	Apr., 5-8
Lamps, electric, portable†	Feb., 21-23
Landscaping	Apr., 20-23
Lawn mowers, home-built†	Apr., 13-18
Lights, night†	Mar., 33-34
Lip lacquer, care in use†	Apr., 29
Lipsticks†	June, 18-19
Livestock, converting grass to food	May, 3
Loud-speaker, high-fidelity†	Jan. 13
Mayonnaise, standards	Mar., 37-38
Mineral oil, laxative, ill effects	June, 3
Motion pictures†	each issue
Nail lacquers†	May, 9-10
Oil, crankcase, cold-weather operation problem	Feb., 12-13
motor, advertising†	Feb., 11-12
Openers, jar, can, and bottle†	June, 10
Outboard motors†	June, 8-10
Paint, auto, reduced price†	Mar., 10
Phonograph pickups†	Mar., 21-22; May, 19-20
Phonograph records†	each issue
new books	Feb., 29-30
Phonograph turntable units, low-priced†	Feb., 23-24
Phosphoric acid, use in foods	Jan., 3
Piano, toy†	Jan., 17
Polisher, electric, floor†	Jan., 11
Powder, face†	Apr., 11-12
Projectors†	Feb., 18-21; May, 24
Radio, AM-FM†	Feb., 16-17; May, 16
automobile†	Feb., 14
clock, table-model†	June, 21
converter, FM†	May, 20
faults, and television	Feb., 24-25
FM, pre-emphasis and de-emphasis†	Jan., 21
phonograph combination†	May, 18; June, 24
prices declining	Jan., 4
receivers, table-model†	Mar., 11; May, 17-19
receivers and tuners, FM, faulty low-priced table models	Jan., 8
tuner, AM†	June, 24
AM-FM†	Feb., 16
Ranges, electric, sales decline	June, 4
gas†	Mar., 5-10
Rat control methods†	Mar., 12-15
Recorders, wire†	Jan., 23-25
Refrigerators, four electric†	Mar., 16-18
Rubber footwear, men's and women's†	Apr., 9-10
Rugs and carpets — II	Jan., 16-18
Scale, baby†	Apr., 10; 29, 30
Scouring powder (Old Dutch Cleanser)†	Apr., 30
Shampoo, synthetic detergent (Halo)†	Apr., 29
misbranding†	Apr., 4; June, 4
Sheets, crib, waterproof†	June, 19-20
Shirt, man's white†	Apr., 19
Shoes, waterproofer for soles†	June, 30
children's†	May, 5-8
Slide rule, photographic†	Apr., 8
Soap substitute (Leisure)†	Mar., 38
Soapless cleaners and detergents	Mar., 25-27
Stain remover kit†	Apr., 12
Sugar, prices	June, 4
Tanks, aluminum, fuel oil storage	June, 29-30
Tanks, septic, pamphlet available	June, 29
Telescope (10-power "Officer-of-the-Deck")†	Mar., 33
Television, table-model†	June, 22
Thermometer, for freezer cabinet	May, 30
Thread, sewing†	Jan., 12-13
Tires, automobile†	Jan., 19-20
Toilet seats for babies†	Jan., 25-26
Toothpastes and powders, as cause of tooth decay	June, 29
Vacuum cleaners†	Jan., 9-11; May, 21-22
Vegetable freshener	May, 4
Vitamin D, excessive use harmful	Apr., 3
Washing machines, automatic†	Feb., 5-6; June, 11-14, 17
availability of parts	May, 25
non-automatic†	June, 23
Water heaters, tankless†	May, 13-16

†*indicates that listings of names or brands are included.*

Plastic Films for Household Use

PLASTIC PRODUCTS for household use have appeared in several forms which may be divided into classes, roughly, as follows:

1. Fabrics made of textile yarns treated with plastics *before* weaving.

2. Fabrics made of synthetic fibers, rayon, and nylon.

3. Textiles impregnated with plastics *after* weaving, usually of a stiff and "boardy" character.

4. All-plastic materials, such as *Pliofilm*, which have no woven fabric as a supporting base; for these the name "film" seems particularly appropriate. All those tested were flexible and elastic; most were transparent or translucent; some were printed in colorful designs.

These attractive films have already appeared made up into aprons, shower curtains, crib sheets, mattress covers, shelf edging, refrigerator bowl covers, and tablecloth covers, with the list growing rapidly. They are pleasing in appearance, drape gracefully, and, though fragile-looking, have, in many instances, fairly good life expectancy, where service is not severe, especially *if* properly chosen for the job to be done.

When purchasing the samples, it was found difficult to buy them as yard goods under brand names. The trade name of the plastic in fabricated articles, such as shower curtains, is usually given. The buyer can rely on a measure of uniformity if the film is of a nationally advertised brand, but some large fabricators use their own brand names and apparently occasionally market types of plastic films that are actually different under the same brand name. (See listings, for example, of the two *Crysto-Cleers*.)

Characteristics Studied

The tests made were designed to determine various important properties of the films, particularly as related to household uses. Thickness, weight, tensile strength, and tear resistance are, in general, related to durability and often determine the selection of a certain film for a specific use. Resistance to elongation under sustained load is of particular importance in films intended for drapes, shower curtains, or furniture covers since some of the films have been found gradually to assume a "wilted" appearance due to slow deformation under the stress due to their own weight. Resistance of the films to damage from oils, fats, etc., is of very real importance in any that are used in the kitchen and refrigerator; it is also important, too, to bear in mind that most of the plastic film materials become much stiffer with cold. Resistance to ink is of importance in some uses. Films of considerable stiffness and good draping qualities are most suitable for use as drapes.

Electrostatic properties do not bear directly upon the life of the materials but can affect convenience of use under some circumstances. A strongly "electrified" table cover, for example, is hard to fold up and may be attracted to grounded objects such as radiators, etc. An electrified (statically charged) surface can also attract dust particles.

All the films tested were of the thermoplastic type and could be fabricated by the application of heat at the points of joining. This is not of any great importance to the average purchaser, but tests made determined that all samples studied were, as a matter of fact, of this type.

Resistance to Damage by Heat

Some plastic films are seriously deformed or crinkled when brought too near a source of heat such as a hot stove oven, or when a hot dish or pan is laid on the material. All samples were checked for this defect. The three most resistant to heat were: *Sydney-Thomas*, *Krene*, and Ward's *Vinyl*, which were practically unaffected by temperatures up to the boiling point of water. The brands affected most were: *Crysto-Cleer Polythene*, *Crysto-Cleer Visqueen*, *Fabrico*, and the two *Videnes*. Damaged to a moderate extent were: *Plastron*, *Koroseal*, *Wataseal*, and Sears' *Vinyl*.

Flammability is a characteristic of great importance since most household uses subject the films to some danger of ignition, and the films vary considerably in their resistance to

combustion. All of those tested were more or less flammable, but they were not of the most dangerously flammable types. Some would burn at the point of ignition but would not support combustion, which is a great advantage. A burning rate of 5 linear inches in 6 seconds of a strip of film 1⅛ in. x 12 in. was considered the limit for speed of burning. If a film burned faster that this, it was placed in the *C-Not-Recommended* class even when its other qualities may have been found satisfactory.

Films which age rapidly and become brittle and those which fade easily have at best rather short use expectancy and may give unsatisfactory service during their brief life, as well.

In the listings of films made up into various articles, the manufacturer named is the fabricator; wherever possible, the brand name and manufacturer of the film are also given. Except as noted, the films were not stained by ordinary fountain pen ink; however, drops of India ink allowed to dry on the films caused more or less deformation in all except *Crysto-Cleer Visqueen*, Ward's *Vinyl*, and *Wataseal*. Resistance to fading was found satisfactory unless otherwise noted. Materials purchased by the yard were 36 in. wide. Ratings are cr48.

A. Recommended

Crysto-Cleer (Boland Mfg. Co., Chicago; distributed by Star Novelty & Utilities, Inc., Chicago) $1.29 for 54 in. x 70 in. tablecloth cover of Du Pont *Polythene*. Clear, thin, fairly strong and had good resistance to aging. Stretching or deformation under sustained load, slight (advantageous). Burned rather slowly. Exceptionally high tear resistance. Resistance to fat and oil damage, poor. Good drape appearance.

Fabrico (Fabrico Mfg. Corp., 557 W. Jackson Blvd., Chicago) 98c for 54 in. x 54 in. tablecloth cover at F. W. Woolworth. Seemed identical with preceding brand; had almost exactly the same properties and characteristics.

Wataseal (Sears-Roebuck's Cat. No. 66—2787) 47c per yd., plus postage. Clear, but slightly opaque, which gives it an appearance of whiteness. Thickest of the films tested, and very strong. Had the best all-round properties, when new, of any of the films tested but did not resist aging as well as two preceding brands. Elongation under sustained load, less than average of the films tested. In flammability test, *Wataseal* burned, but did not support combustion, an advantage. Tear resistance, good, but much below that of the two preceding brands. Resistance to oil damage, very good. Good drape appearance.

B. Intermediate

Koroseal (Jos. A. Kaplan Inc., Chicago; distributed by Montgomery Ward's Cat. No. 71—4055C) $3.95 for shower curtain. Peach color. Thin, strong film with fairly good resistance to aging. In elongation under sustained load, one of 2 worst of films tested, indicating it was unsuitable for the use for which it had been fabricated. Burned most slowly of the films tested that supported combustion, but with smoke of suffocating character. Had rather poor resistance to tearing. Resistance to oil damage, good. Drape appearance excellent when new. (*Koroseal* is the registered trade mark of the B. F. Goodrich Co.)

Sydney-Thomas (Sydney-Thomas Corp., Cincinnati) 79c per yd. Red checked, opaque. Relatively thick, strong film with very good resistance to aging. Elongation under sustained load, about average. Burned, but would not support combustion (advantageous). Tear resistance, rather poor. Resistance to oil damage, fair. Very good drape appearance. Ordinary fountain pen ink stained this film slightly.

Crysto-Cleer (Boland Mfg. Co.) 89c for 54 in. x 54 in. tablecloth cover of *Visqueen* plastic. Clear, thin, rather weak film with very good resistance to aging. Deformation under sustained load, slight. Burned very slowly. Good resistance to tearing. Resistance to oil damage, poor. Good drape appearance. This film was much like *Crysto-Cleer Polythene*, but its measured characteristics differed to some extent.

C. Not Recommended

Krene (National Carbon Co., Inc., New York 17) $5.95 for 6 ft. x 6 ft. shower curtain at a Sears-Roebuck retail store. Pink plaid pattern. This film had very good properties when new, practically on a par with *Fabrico*, and had satisfactory resistance to aging. It would have warranted a higher rating had it not been for its excessive rapidity of burning.

Plastron (Distributed by W. T. Grant stores) 79c per yd. Blue plaid pattern. Had fairly good original characteristics and satisfactory aging qualities. Like *Krene*, would have warranted a higher rating had it not been for excessive rapidity of burning. Rather poor tear resistance.

Videne Bright Blue (Richards-Boggs-King, Chicago) and *Videne* Cherry (Montgomery Ward's Cat. No. 16—1630) 25c per yd., plus postage. These two films have the same brand name but differ in some respects. The cherry *Videne* had fairly good original characteristics but those of the bright blue *Videne* were rather poor. They were similar in having very poor resistance to aging. In the Fade-Ometer the blue material turned to green and became shrunken and embrittled; the cherry-colored sample did not change color but showed shrinkage and embrittlement. Both burned very rapidly. Altogether an inferior grade of plastic film material.

Vinyl (Montgomery Ward's Cat. No. 16—1631) 37c per yd., plus postage. Fairly heavy white film with very good original properties and satisfactory resistance to aging. Would have warranted a higher rating except for excessive rapidity of burning.

Vinyl (Sears-Roebuck's Cat. No. 66—2711) 25c per yd., plus postage. A fairly thin pink film. Did not resemble other *Vinyl* sample in original characteristics and was much poorer in resistance to aging. Somewhat better than *Videne* but is to be classed as one of the inferior plastic films. The film turned brown in the Fade-Ometer but did not show much shrinkage or embrittlement. Burned with excessive speed.

Painting Small Concrete Block Buildings

THE increased use of concrete block for buildings has produced a wide demand for paints that will beautify such structures, make them water-resistant, and hide defects in blocks and mortar. A suitable paint of low cost is required for application to outside and inside walls of such concrete block structures as garages, small homes, milk barns, and similar buildings, which one or two persons can cover in one or two days, working with brushes and ladders, without the necessity for using spray pressure methods and complex scaffolding. Several varieties of paint are suitable, and (except whitewash) may be purchased either factory-mixed or to be mixed on the job. They include whitewash, cold-water paints, oil paints, and cement-lime-water paints. For painting concrete floors, however, the water-mixed paints are not satisfactory.

Whitewash is the cheapest and easiest to apply, but dusts off when dry, and usually requires renewing at least once a year; it is suitable only when absolutely minimum cost is necessary. The National Lime Association at 927 15 N.W., Washington, D. C., supplies a pamphlet free containing information concerning whitewash.

Cold-water paints contain casein, glue, resins of various kinds, or other binders, lime, and other materials. Such paints are available in various tints in the form of powder, and are mixed with cold water in the proportions recommended by the manufacturers. With the exception of whitewash, cold-water paints are the easiest to apply, but are less water-resistant than cement-lime-water paints, and require more frequent renewal. Resin-emulsion paints usually are applied to dry masonry, but sometimes the first coat pulls under the brush, making application difficult. In such a case it is better to dampen the wall than to dilute the paint further with water; dampening the wall also permits the paint to spread over more surface. (When casein paints or resin-emulsion paints are used, it is not necessary to wet down the masonry, or spray it afterwards.)

Oil paint is the most expensive of all paints used for masonry, and requires at least two coats for proper coverage, the first of which should be a priming coat. Most oil paints require much preparation of the surface and other treatment if they are to be satisfactory; for that reason they are regarded as best suited to use on buildings of fairly expensive types. One variety of oil paint is made by grinding Portland cement in oil, to provide a cheap extending pigment.

The most practical low-priced concrete paints available probably are those based on Portland cement and lime. They usually contain also white pigments such as titanium dioxide or zinc sulfide, extending pigments, and inorganic chemicals such as calcium chloride or sodium chloride; tinted paints of this class should contain limeproof pigments only. Organic binders are not suitable for these paints, but the commercial powders usually contain some fine siliceous aggregate.

A low-cost white paint that produces a water-resistant and long-lasting coating can be mixed on the job from a formula given in the *Universal-Atlas Handbook of Concrete Construction* (Universal-Atlas Cement Co., 1400 Chrysler Bldg., N.Y.C.). The ingredients are white cement, masons' hydrated lime, and water pure enough to be fit for drinking. An amount of paint suitable for convenient use by a single painter is made by measuring into a clean bucket, one quart of cement, one quart of lime, and about 1½ quarts of water; this should be stirred well, using only enough water to produce a thick creamy mixture. This amount of paint is readily kept uniform by stirring as painting proceeds, so that settling does not take place. A fast, experienced painter accustomed to using this type of paint could handle double the quantity recommended.

Before painting, water must be sprayed on the wall and allowed to soak in. If the surface is too wet, the paint will streak and flow, while a wall that is too dry is hard to paint and absorbs too much water from the paint.

The coating of paint must be kept damp until it has fully "hydrated" or set into concrete, just as the surface of a

concrete floor or road is kept damp while it hardens. Thus it is essential to determine when initial or "first" set has occurred; this is the case when it scarcely shows on a hand that is rubbed hard on the painted wall, and when water sprayed on a small spot on the wall does not turn "milky" or cause streaking of the surface. Gentle spraying or wetting with a hose is then started, and repeated at intervals for a total period of about 48 hours. The frequency of spraying required depends upon temperature, wind velocity, humidity, and the intensity of sunshine on the work. If painting is done on a cloudy still day, spraying every 3 to 4 hours may suffice, but if the wall is in full sunlight, it may be necessary to spray every hour or oftener. A final spraying late at night usually serves to keep the wall properly damp until early morning. When wet, the paint appears thin, but as soon as it dries, the strength of color is satisfactory.

If the wall to be painted is not smooth, the surface should be prepared before painting by knocking off all unsightly rough protuberances, and scrubbing off any dirt and mortar "weeps." Any holes and open joints should be pointed up with a mixture containing 1 part cement, 2 parts sand, and ½ part hydrated lime, with enough water to make a stiff paste; the wall must be wet before pointing up.

Rough cement or cinder-block walls should be given a preliminary "grout" before applying resin-emulsion, oil, or cement-lime-water paint. The War Department Technical Manual TM 5-618, "Painting Repairs and Utilities" (57 pages, illustrated, including index, 25c from Supt. of Docs., Washington, D. C.), recommends a mixture of 1 part Portland cement, 3 parts clean sharp sand, and 15% hydrated lime, thinned to a paste with water. This paste is scrubbed into the wall with a stiff fiber brush, and allowed to set for 48 hours with frequent dampening to assure proper hydration of the cement, before painting.

Vacu-Mite Car Vacuum Cleaner

THE *Vacu-Mite* cleaner is a gadget which is to be connected to the intake manifold of the engine of a car and used as a vacuum cleaner for cleaning upholstery, floors, etc., with the engine running at idling speed. The price has been about $5.

If the car is equipped with a vacuum-type windshield wiper, installation of the *Vacu-Mite* is relatively simple. The tubing leading to the windshield wipers is cut at a point close to the glove compartment and a tee (which is provided) inserted into the two ends of the tube. A short length of tube is then used to connect the third outlet of the tee to a valve installed on the rear wall of the glove compartment. To use the device, the valve control button is depressed and the nipple on the end of the tube of the cleaner is inserted into the valve.

Installation on cars equipped with electric windshield wipers is more difficult and probably best done by a service station, as it requires removal of the intake manifold, drilling and tapping a 7/16-in. hole, installing an elbow and copper tubing, which are not provided, and replacing the manifold. The cost of this job may be considerable in some cases; estimates obtained by CR indicate that it might cost $5 to $10, if done by a garage mechanic. A handy consumer could do the job himself, but it would not be easy, and it would take at least 2 to 3 hours' time, and some skill.

The design of this gadget is good, and the unit was quite effective in removal of dust from car seats. Consideration was given to the possibility that the dust might get into the engine, since the suction comes from the intake manifold, but it was felt that the filtration of the dust was effective, and the appliance, if used with reasonable frequency, would be safe from that standpoint, provided that care was taken to see that it was never used if the filter bag was worn, damaged, torn, or split.

B. Intermediate

Vacu-Mite Car Vacuum Cleaner (Craft Industries, 11 Niagara St., Buffalo) $4.95. Plastic case approximately 9½ in. long. Small enough to be stowed, with its 11½ ft. of tubing, in the glove compartment of the average car.

PHONOGRAPH RECORDS

By Walter F. Grueninger

Please Note: In the ratings AA indicates highly recommended; A, recommended; B, intermediate; C, not recommended.

ORCHESTRA

Grieg: *Peer Gynt Suite No. 1.* Philadelphia Orchestra under Ormandy. 4 sides, Columbia Set MX 291. $3.35. Incidental music to Ibsen's drama admired the world over. Ormandy's surface-deep reading is no match for Beecham's discernment thou Ormandy's recording is slightly more realistic. Overall, Columbia Set MX 180. **Interpretation A**
Fidelity of Recording AA

Khachaturian: *Gayne*—Ballet Suite No. 2. Philharmonic-Symphony Orchestra of New York under Kurtz. 4 sides, Columbia Set MX 292. $3.35. Empty music of little originality, inferior to "Suite 1." Expert performance. Recorded at low volume level with violins too distant, highs cut off too soon. Some surface noise. **Interpretation AA**
Fidelity of Recording A

Prokofieff: *Classical Symphony.* Philadelphia Orchestra under Ormandy. 4 sides, Columbia Set MX 287. $3.35. A fascinating modern work which has won its place in the repertory. Ponderous performance with tempo liberties. Unsurpassed performance is the Boston Symphony's on RCA Victor 7196/7 but recording is poor. On one count or another remaining recordings give ground to the Philadelphians.
Interpretation A
Fidelity of Recording AA

Brahms: *Symphony No. 2.* Philharmonic-Symphony Orchestra of New York under Rodzinski. 10 sides, Columbia Set 725. $7.10. A great symphony. Rodzinki's performance gains as it proceeds but the occasional suggestion of things not hanging together in the first two movements makes the performance inferior to Weingartner's Columbia Set 493, my favorite competitor. Rodzinski's recording is wide range but could stand more dynamic contrast and greater depth in mezzo forte passages. Weingartner is well recorded in the narrower range of prewar British disks. Overall, Weingartner.
Interpretation A
Fidelity of Recording A

CONCERTO

Brahms: *Concerto No. 1.* Clifford Curzon (piano) and the National Symphony Orchestra (Great Britain) under Enrique Jorda. 12 sides, English Decca Set 47. $13.65. A ponderous work less highly regarded, for example, than Brahms symphonies. The performance—particularly the orchestra—does little to relieve this situation, lacking the sharpness of contour and dramatic zest of the competitive set featuring Serkin. Schnabel's Victor Set 677 is not obsolete either. Decca's recording is best although in the heaviest passages a slight rattle is audible when using a *GE VR* pickup at one ounce, and the piano's bass is emphasized out of balance with the higher frequencies, resulting in a dull, tubby sound. Overall, Serkin's Columbia Set 652 ($8.35). **Interpretation B**
Fidelity of Recording A

Delius Society Set. "Concerto for Piano and Orchestra." Betty Beecham (piano soloist) (5 sides) and "Marche Caprice" (1 side) and "A Song of the High Hills" (6 sides). Royal Philharmonic Orchestra and the Luton Choir under Beecham. RCA Victor Set 1185. $8.50. The "Concerto" and the "Caprice" are early works in which Delius' characteristic sensuous, loosely constructed style is not yet fully developed. "A Song of the High Hills" is one of his mature, major works. The interpretation is definitive. Recording of the piano: well forward, bass accented, rather tubby. Recording of orchestra: loud bass, soft high frequencies. Satisfactory recording, on the whole, but not up to England's best.
Interpretation AA
Fidelity of Recording A

Grieg: *Concerto in A Minor.* Oscar Levant (piano) and the Philharmonic-Symphony Orchestra of New York under Kurtz (7 sides) and **Rachmaninoff:** *Prelude in E Flat* (1 side). Levant (piano). Columbia Set 741. $8.85. American record buyers love this concerto as do I. Levant oversentimentalizes and, in general, hams up the first movement; second movement, acceptable; third movement, stiff and awkward. The orchestra follows effectively except for some late entrances. Excellent recording, pressed on vinylite.
Interpretation B
Fidelity of Recording AA

Mendelssohn: *Concerto in E Minor.* Mischa Elman (violin) and the Chicago Symphony Orchestra under Defauw (7 sides) and *Song Without Words* (Op. 26, No. 1) (1 side). Elman (violin). RCA Victor Set 1196. $6. As Sterndale Bennett remarked to Mendelssohn, there is something "essentially and exquisitely feminine" about this work. That is where this performance falls short, for it is a wee bit heavy and labored. Unorthodox phrasing and excessive *rubato* do not help matters, either. Defauw follows Elman's lead faithfully. Gorgeous recording with the violin well in front, except in the slow movement where the orchestra occasionally overshadows the violin. The surface of side 1, my set, is noisy. The Mendelssohn to buy is the Milstein-Columbia Set 577. **Interpretation B**
Fidelity of Recording AA

Schumann: *Concerto in A Minor.* Artur Rubinstein (piano) and the RCA Victor Symphony Orchestra under Steinberg. 8 sides, RCA Victor Set 1176. $6. A famous, enduring concerto. Rubinstein plays rhythmically without excessive "romantics." The phlegmatic orchestra, however, compels a rating of less than the highest. The orchestra is not always clearly recorded but the piano is full and round. Poor surfaces. Arrau in RCA Victor Set 1009 is more mannered but his orchestra is better and he is equally well recorded. Little reason to discard Arrau though new purchasers may prefer Rubinstein. **Interpretation A**
Fidelity of Recording A

CHAMBER AND INSTRUMENTAL

Brahms: *Sonata No. 2 in F Major* (7 sides) & **Nardini:** *Lento* (1 side). Piatigorsky (cello) and Berkowitz (piano). Columbia Set 590. $5.85. Victor no longer lists the decade-old recording by Casals and Horszowski and more's the pity, for on all counts it is superior to this release. Piatigorsky rushes the first movement and never gets at the soul of this music, a favorite at cello recitals. His partner follows dutifully. Pinched recording. **Interpretation B**
Fidelity of Recording B

Piano Music of Chopin and Liszt. Horowitz (piano). 6 sides, RCA Victor Set 1165. $4.75. Chopin's "Ballade No. 1" and "Nocturne in F Sharp"; Liszt's "Au Bord" and "Hungarian Rhapsody No. 6." Excessive *rubato*, in the "Ballade" especially. Otherwise the performance merits cheers. Magnificent recording. **Interpretation A**
Fidelity of Recording AA

Mozart: *Quintet in D for Strings* (K.593). Budapest String Quartet and Milton Katims (viola). 6 sides, Columbia Set 708. $4.60. Concentrated, romantic work from Mozart's last period. Exceptionally fine performance. Recorded in a resonant chamber with edge to Roismann's violin and less warmth than the recent Paganini Quartet recordings possess.
Interpretation AA
Fidelity of Recording B

Schumann: *Kreisleriana* (9 sides) & *Arabesque* (Op. 18) (1 side). Claudio Arrau (piano). Columbia Set 716. $7.25. Eight fantasies comprise one of Schumann's top works.

Arrau plays the lively sections best, though some will like the slow numbers because few are exaggerated, contrary to Cortot's older, hard-to-find RCA Victor Set 493. Arrau's recording ranks about the same as Cortot's, both narrow ranged. If you have it, hold on to Cortot.

Interpretation A
Fidelity of Recording B

Schumann: *Scenes of Childhood.* Maryla Jonas (piano). 4 sides, Columbia Set MX 290. $3.35. Thirteen simple, tender compositions. Miss Jonas' frequently exaggerated playing à la Chopin, is not so simple, however, as you will hear readily in "Träumerei." Admirably solid, round recording but surfaces of sides 1 and 4 swish. Overall, no need to discard Moiseivitch's withdrawn Victor disks 7705/6.

Interpretation A
Fidelity of Recording AA

Smetana: *Trio* (Op. 15). Kaufman (violin), Van Den Burg (cello), Firkusny (piano). 6 sides, Vox Set 628. $4.75. A romantic work that deserves to be heard more often. Played with insight and dash. The recording is uneven—at its best, good; at its worst, hash. The limitation of top frequencies cuts off the high register of the violin. Piano well forward, too much so in some passages. Cello too far away. Room resonance satisfactory. Noisy surfaces.

Interpretation AA
Fidelity of Recording B

Toch: *Serenade for 2 Violins and Viola.* Kaufman, Monasevitch, Menhennick. 4 sides, Vox Set 117. $3.50. First recording of this ingratiating, lyric music. Spirited performance but pinched recording and noisy surfaces are tremendous liabilities. **Interpretation AA**
Fidelity of Recording B

A Treasury of Harpsichord Music. Landowska (harpsichord). 12 sides, RCA Victor Set 1181. $8.75. Nearly an hour's recital by the foremost harpsichordist of our time. In general her style, facility and understanding of this music is unsurpassed. Isn't there, however, more pounding and tension than necessary? Much of this music by Bach, Scarlatti, Rameau, Handel is uninteresting. Exceptionally informative program notes and illustrations contributed by Mme. Landowska. Frequency range and color tops any harpsichord recording I recall but in exceedingly heavy passages, due to the proximity of the mike, the harpsichord sounds like carillons! I deplore the fact that the packaging makes it necessary for a consumer to buy all selections even though he may want only one. **Interpretation A**
Fidelity of Recording A

VOCAL

Bach: *Cantata No. 106.* Harvard Glee Club, the Radcliffe Choral Society, and a chamber orchestra conducted by G. Wallace Woodworth. 6 sides, Technichord Set 6. $5.85. A lovely work of which only the "Sonatina" has been recorded heretofore. Presented with sincerity though not with security by seven instrumentalists and 21 college singers who double up on solos, with one exception. Recorded with some shrillness in the voices at a rather low volume level. Resonant chamber, commendable balance, some scratch. An extensive booklet including a miniature German score, though the performers sing in English, is included. **Interpretation B**
Fidelity of Recording A

Brahms: *Zigeunerlieder.* Lotte Lehmann (soprano). 4 sides, RCA Victor Set 1188. $3. Eight of the eleven songs which comprise this group written for vocal quartet but arranged in the present solo, abbreviated form by Brahms. Mme. Lehmann sings with intensity if, no longer, with freshness and loveliness. As an interpreter she is superior to the Madrigal Singers who present this music in its original, most captivating form in Columbia Set MX 88.

Interpretation A
Fidelity of Recording AA

Cantorial Chants. Moshe Kusevitzky (cantor). 8 sides, RCA Victor Set S 52. $4. A sensational tenor voice projected with less shading than I prefer though this lack is a minor one considering the many extraordinary qualities of the performance. Accompanying string ensemble recorded in a narrow range. The cantor is well recorded. **Interpretation A**
Fidelity of Recording A

Album Mozartiano. Italo Tajo (basso). 6 sides, Cetra-Soria Set 104. $6.52. Largely unfamiliar opera and concert arias worth recording. Tajo possesses commendable musicianship and style but, occasionally, he lacks the color and drama that would make him a truly distinguished performer. Slightly audible surfaces. Satisfactory Italian recording though not wide ranged. The Italian booklet would have been more helpful if the English translations had been given.

Interpretation A
Fidelity of Recording A

Puccini: *La Bohéme.* Tucker, Cehanovsky, Baccaloni, Sayao, Benzell, Valentino, etc., with Antonicelli conducting the Chorus and Orchestra of The Met. 26 sides, Columbia Set OP 27 (2 vols.). $19.95. Write this off as an effort that neither artists nor engineers executed successfully. The singing never reaches that pitch of artistry a recorded performance deserves. The low volume, restricted fidelity recording hurts the orchestra more than the singers. As if that isn't damaging enough, the direction is heavy and undistinguished. Libretto furnished. **Interpretation B**
Fidelity of Recording B

LIGHT

Barroso-Russell: *Brazil* & **Rodgers-Hart:** *Lover.* Les Paul. 2 sides, Capitol 15037. 75c. The strange music you hear represents a series of dubbings of maracas, drums and other percussion instruments, guitars, bass and what not. The manufacturer calls this conglomeration "the new sound." Thrilling performance, extraordinary range and electronic handling make this a MUST for hi-fi fans and a striking novelty for any library. Quiet surfaces. **Interpretation AA**
Fidelity of Recording AA

A Presentation of Progressive Jazz. Stan Kenton and His Orchestra. 8 sides, Capitol Set C D 79. $4. There's a hullabaloo on the cover liner about this being the new jazz. It borrows from the Chinese, Radio City, Hollywood, Billie Holliday, Edgar Varese and other sources. I don't think much of it but its novelty may appeal to some. Titles include "Elegy for Alto," "Lonely Woman," "Monotony," "Lament," etc. Fair performance, limited range recording pressed on quiet surfaces. **Interpretation B**
Fidelity of Recording B

Jo Stafford Sings American Folksongs (vocalist). 6 sides, Capitol Set C C 75. $3. Jo Stafford's style is arresting and sophisticated though she underplays the drama and each song sounds like its predecessor. The accompanying orchestra, playing tasteful arrangements, detracts from the desirable simplicity. Fuzzy recording of the orchestra, emphasizing the highs, but the voice is clearly recorded. Included are "He's Gone Away," "Barbara Allen," "Poor Wayfaring Stranger," etc. **Interpretation B**
Fidelity of Recording A

Campus Favorites. Kay Kyser and His Orchestra. 8 sides, Columbia Set C 150. $3.75. "Anchors Aweigh," "On Wisconsin," "Boola Boola" and others enjoyed by the young and young of heart. Corny, sentimental production unevenly recorded, with the brass choir badly suppressed.

Interpretation A
Fidelity of Recording B

Nellie Lutcher (vocalist). 6 sides, Capitol Set C C 70. $3.15. Lively nightclub specialty numbers sung in a rasping voice to the accompaniment of a piano and rhythm section. Not for me, though some think she is tops. **Interpretation C**
Fidelity of Recording A

Saturday Night Swing Session, Vol. 1. Featuring Eldridge, Phillips, Safranski, Casey, etc. 6 sides, Vox Set 303. $3.75. Recorded from an actual radio broadcast over WNEW where there is an audience and the players are "uninhibited." Most of the improvisation is third rate. Poor recording.

Interpretation C
Fidelity of Recording C

Ratings of Motion Pictures

THIS section aims to give critical consumers a digest of opinion from a wide range of motion picture reviews, including the motion picture trade press, leading newspapers and magazines—some 19 different periodicals in all. The motion picture ratings which follow thus do not represent the judgment of a single person, but are based on an analysis of critics' reviews.

The sources of the reviews are:

Box Office, Charm, Chicago Daily Tribune, The Christian Century, Cue, Daily News (N.Y.), *The Exhibitor, Harrison's Reports, Motion Picture Herald, National Legion of Decency List, Newsweek, New York Herald Tribune, New York Times, Parents' Magazine, Release of the D.A.R. Preview Committee, Successful Farming, Time, Variety* (weekly), and *Unbiased Opinions of Current Motion Pictures* which includes reviews by the General Federation of Women's Clubs, the American Legion Auxiliary, National Film Music Council, and others.

The figures preceding the title of the picture indicate the number of critics who have been judged to rate the film A (recommended), B (intermediate), or C (not recommended) on its entertainment values.

Audience suitability is indicated by "A" for adults, "Y" for young people (14-18), and "C" for children, at the end of each line.

Descriptive abbreviations are as follows:

adv—adventure
biog—biography
c—in color (Technicolor, Cinecolor, Trucolor, Magnacolor, Vitacolor, etc.)
car—cartoon
com—comedy
cri—crime and capture of criminals
doc—documentary
dr—drama
fan—fantasy
hist—founded on historical incident
mel—melodrama
mus—musical
mys—mystery
nov—dramatization of a novel
rom—romance
soc—social-problem drama
trav—travelogue
war—dealing with the lives of people in wartime
wes—western

A	B	C		
—	3	—	Adventures in Silverado	*wes AYC*
—	6	4	Adventures of Casanova	*adv A*
—	7	7	Albuquerque	*wes-c A*
—	3	5	Alias a Gentleman	*com A*
2	6	8	All My Sons	*dr A*
—	5	9	Always Together	*com A*
—	—	—	An Ideal Husband (See Ideal Husband, An)	
—	5	3	Angelina	*propaganda-dr A*
—	4	1	Angels' Alley	*com AYC*
—	4	11	Anna Karenina	*dr A*
—	4	7	Another Part of the Forest	*dr A*
—	5	2	Antoine et Antoinette	*com A*
—	5	9	April Showers	*mus-com A*
1	1	10	Arch of Triumph	*war-dr A*
—	7	7	Are You With It?	*mus-com AY*
—	4	2	Argyle Secrets, The	*cri-mel A*
—	5	—	Arizona Ranger, The	*wes A*
—	2	3	Arthur Takes Over	*com A*
—	2	3	Assigned to Danger	*cri-mel AY*
—	4	1	Bandits of Dark Canyon	*wes AYC*
—	9	—	Beauty and the Beast	*fan A*
—	8	2	Berlin Express	*war-mel AY*
—	3	1	Best Man Wins	*com A*
3	5	8	B. F.'s Daughter	*nov A*
1	6	4	Big City	*mus-dr AYC*
5	9	2	Big Clock, The	*cri-mel A*
—	4	5	Big Town After Dark	*cri-mel A*
—	12	1	Bill and Coo	*com-c YC*
1	12	3	Bishop's Wife, The	*fan A*
—	3	10	Black Bart	*wes-c AY*
—	2	2	Black Hills	*mus-wes AYC*
—	3	2	Blondie's Anniversary	*com AYC*
—	—	5	Bohemian Rapture	*mus-biog A*
—	3	1	Bold Frontiersman, The	*wes AYC*
1	5	2	Bride Goes Wild, The	*com A*
—	4	3	Brothers, The	*dr A*
—	—	7	Buckaroo from Powder River	*mus-wes AYC*
1	12	1	Bush Christmas	*mel YC*
—	5	3	Caged Fury	*mel AY*
—	2	2	California Firebrand	*mus-wes-c AYC*
2	13	2	Call Northside 777	*doc-mel A*
—	5	3	Campus Honeymoon	*mus-com A*
—	—	4	Campus Sleuth	*mus-com AY*
1	10	5	Captain from Castile	*hist-dr-c A*
—	—	—	Cary and the Bishop's Wife (See Bishop's Wife, The)	
—	4	8	Casbah	*mus-mel A*
2	12	2	Cass Timberlane	*nov A*
—	2	1	Cavalleria Rusticana	*mus-dr A*
—	7	1	Challenge, The	*mys-mel AY*
—	4	1	Cheyenne Takes Over	*wes AYC*
—	1	7	Close-Up	*war-mel A*
—	6	—	Confessions of a Rogue	*com A*
—	2	3	Crime and Punishment	*dr A*
—	—	3	Crossed Trails	*wes AYC*
—	9	6	Daisy Kenyon	*dr A*
—	3	—	Dammed, The	*war-dr A*
—	3	4	Dangerous Years	*mel AYC*
—	1	4	Day of Wrath	*mel A*
—	7	1	Dear Murderer	*cri-mel A*
—	5	—	Design for Death	*war-doc A*
—	—	7	Devil Ship	*mel A*
—	1	3	Devil's Cargo	*mys-mel A*
—	—	5	Docks of New Orleans	*cri-mel AY*
3	14	1	Double Life, A	*dr A*
—	—	6	Dreams That Money Can Buy	*fan-c A*
—	5	4	Driftwood	*dr AYC*
—	6	—	Dude Goes West, The	*wes-com AYC*
—	1	6	Elixir of Love	*mus-dr A*
2	2	—	Emperor Waltz, The	*mus-com-c AY*
—	1	5	Enchanted Valley, The	*dr-c YC*
1	5	3	Eternal Return, The	*dr A*
—	8	4	Exile, The	*hist-dr AY*
—	6	4	Fabulous Texan, The	*mel A*
1	6	1	Fanny	*dr A*
—	5	1	Farrebique	*dr A*
—	6	1	Fighting Father Dunne	*dr AYC*
—	5	1	Fighting Mad	*mel AY*
—	3	9	Flame, The	*cri-mel A*
—	3	4	Fledermaus, Die	*mus-com-c A*
—	1	3	For You I Die	*mel A*
1	9	2	Fort Apache	*wes AYC*
1	3	—	Four Faces West	*wes-dr AYC*
—	1	4	French Leave	*com AY*
2	11	5	Fugitive, The	*dr A*
—	5	1	Fuller Brush Man, The	*cri-com A*
—	6	3	Furia	*mel A*
—	5	1	Fury at Furnace Creek	*wes AYC*
—	5	1	Gay Ranchero, The	*mus-wes-c AYC*
—	—	3	Gelosia	*cri-dr A*
4	12	3	Gentleman's Agreement	*dr A*
—	3	5	Glamour Girl	*mus-com A*
—	10	6	Good News	*mus-com-c AYC*
—	2	3	Great Glinka, The	*mus-biog A*
—	6	1	Green Grass of Wyoming	*dr-c AYC*
—	1	2	Gun Talk	*wes AYC*
—	—	3	Guns of Hate	*wes AYC*
—	—	9	Half-Past Midnight	*mys-mel A*
—	1	4	Hatter's Castle	*mel A*
—	—	3	Hawk of Powder River, The	*wes AYC*
—	2	7	Hazard	*com A*
—	3	2	Heading for Heaven	*com A*
—	—	5	Heart of Virginia	*dr AYC*
—	2	3	Henry IV	*hist-dr A*
—	2	6	Here Comes Trouble	*com-c A*
1	8	8	High Wall	*mel A*

A	B	C		
—	10	—	**Holiday Camp**	*com A*
1	6	5	**Homecoming**	*war-dr A*
—	4	2	**Hunted, The**	*mel A*
—	3	4	**I Became a Criminal**	*cri-mel A*
—	6	3	**I Love Trouble**	*mys-mel A*
5	9	1	**I Remember Mama**	*com AYC*
—	5	11	**I Walk Alone**	*cri-mel A*
—	1	5	**I Wouldn't Be in Your Shoes**	*cri-mel A*
1	5	9	**Ideal Husband, An**	*com-c A*
—	2	4	**Idiot, The**	*dr A*
1	6	5	**If You Knew Susie**	*mus-com AYC*
—	10	8	**If Winter Comes**	*dr A*
—	5	1	**Inside Story, The**	*com AYC*
—	2	9	**Intrigue**	*mel A*
3	7	1	**Iron Curtain, The**	*doc-mel AYC*
1	6	10	**It Had to Be You**	*com A*
—	2	13	**Jassy**	*nov-c A*
1	5	2	**Jenny Lamour**	*mus-mel A*
—	3	2	**Jiggs and Maggie in Society**	*com AY*
1	9	5	**Killer McCoy**	*mel A*
—	—	3	**King of the Bandits**	*wes AYC*
—	4	4	**Lady from Shanghai, The**	*mys-mel A*
—	3	3	**Last Days of Boot Hill**	*mus-wes AYC*
—	4	4	**Let's Live Again**	*com A*
—	4	11	**Letter from an Unknown Woman**	*dr A*
—	1	5	**Lightnin' in the Forest**	*cri-com A*
2	7	1	**Lost One, The**	*mus-dr A*
—	5	9	**Love from a Stranger**	*cri-mel A*
—	4	2	**Lover's Return, A**	*com A*
—	1	2	**Lucia di Lammermoor**	*mus-dr A*
—	1	3	**Lucky Bride, The**	*mus-com A*
—	2	6	**Madonna of the Desert**	*mel AY*
—	1	7	**Main Street Kid, The**	*com AY*
—	1	4	**Man from Texas, The**	*wes A*
—	1	12	**Man of Evil**	*mel A*
—	1	5	**Mary Lou**	*mus-com AY*
—	7	4	**Mating of Millie, The**	*com AY*
—	3	6	**Meet Me at Dawn**	*com A*
—	7	5	**Miracle Can Happen, A**	*com A*
3	6	6	**Miracle of the Bells**	*dr AYC*
—	2	2	**Money Madness**	*cri-mel AY*
—	5	9	**Mourning Becomes Electra**	*dr A*
1	8	2	**Mr. Blandings Builds His Dream House**	*com A*
—	4	2	**Mr. Orchid**	*war-dr A*
—	—	8	**Mr. Reckless**	*mel A*
2	6	6	**My Girl Tisa**	*dr AY*
—	11	3	**My Wild Irish Rose**	*mus-biog-c AY*
6	7	3	**Naked City, The**	*mel A*
—	7	11	**Night Song**	*mus-dr A*
—	5	1	**Noose Hangs High, The**	*com AYC*
—	7	5	**October Man, The**	*cri-mys A*
—	2	2	**Oklahoma Badlands**	*wes AYC*
—	2	2	**Old Los Angeles**	*mus-wes AYC*
—	5	1	**On An Island With You**	*mus-com-c AY*
—	3	6	**Open Secret**	*mel A*
—	7	10	**Out of the Past**	*mys-mel A*
—	1	2	**Overland Trails**	*wes AYC*
2	7	2	**Paisan**	*war-dr A*
—	8	3	**Panhandle**	*wes-c A*
2	5	2	**Panic**	*cri-mel A*
1	10	4	**Paradine Case, The**	*mys-mel A*
—	1	3	**Passionelle**	*dr A*
1	8	3	**Pearl, The**	*dr A*
—	2	3	**Piccadilly Incident**	*war-dr A*
1	5	2	**Pirate, The**	*mus-dr-c A*
—	5	10	**Pirates of Monterey**	*mel-c A*
—	1	3	**Port Said**	*mel AY*
—	5	5	**Prince of Thieves, The**	*hist-dr-c AYC*
—	5	2	**Raven, The**	*mys-mel A*
—	14	—	**Relentless**	*wes-c AY*
—	3	3	**Return of Rin Tin Tin**	*dr-c YC*
—	2	1	**Return of the Bad Men**	*wes AYC*
—	1	4	**Return of the Lash**	*wes AYC*
—	5	5	**Return of the Whistler, The**	*mys-mel AYC*
—	4	1	**Revenge**	*war-dr A*
—	2	4	**River Lady**	*mel-c A*
1	16	—	**Road to Rio**	*mus-com AY*
—	1	2	**Robin Hood of Monterey**	*wes AYC*
—	3	1	**Rose of Santa Rosa**	*mus-com AYC*
—	—	3	**Rossini**	*mus-biog A*
—	4	4	**Ruthless**	*dr A*
—	3	11	**Saigon**	*mel A*
—	6	7	**"Sainted" Sisters, The**	*dr A*
—	7	5	**Scudda-Hoo! Scudda-Hay!**	*nov-c AYC*
4	9	3	**Search, The**	*war-dr AY*
—	3	9	**Secret Beyond the Door**	*mel A*
—	17	2	**Senator Was Indiscreet, The**	*com A*
—	1	3	**Shadow Valley**	*mus-wes AYC*
—	3	4	**Shaggy**	*dr-c AYC*
—	3	3	**Shakuntala**	*dr A*
—	8	10	**Sign of the Ram, The**	*dr A*
—	—	3	**Silent Conflict**	*wes AYC*
—	3	1	**Silver River**	*wes-dr A*
4	12	1	**Sitting Pretty**	*com A*
—	2	2	**Six-Gun Law**	*mus-wes AYC*
—	11	6	**Sleep, My Love**	*cri-mel A*
—	4	4	**Slippy McGee**	*dr AYC*
—	1	2	**Smart Politics**	*mus-com AY*
—	6	2	**Smart Woman**	*dr A*
—	5	6	**Smugglers, The**	*mel-c A*
—	4	—	**So This Is New York**	*com A*
1	11	6	**So Well Remembered**	*war-dr A*
—	2	3	**Son of the Regiment**	*war-dr A*
2	6	5	**Song of My Heart**	*mus-dr AYC*
—	2	5	**Speed to Spare**	*mel A*
—	2	2	**Spring**	*mus-com A*
—	1	4	**Stage to Mesa City**	*wes AYC*
3	8	2	**State of the Union**	*dr A*
—	5	1	**Story of Tosca, The**	*mus-dr A*
—	4	—	**Strawberry Roan, The**	*mus-wes-c AYC*
1	6	2	**Summer Holiday**	*mus-com-c A*
—	—	4	**Sword of the Avenger**	*dr-c AY*
—	—	5	**Symphonie Fantastique, La**	*mus-biog A*
2	11	2	**T-Men**	*doc-dr AYC*
—	1	3	**Take My Life**	*mys-mel A*
—	5	3	**Tarzan and the Mermaids**	*adv AYC*
2	5	1	**Tender Years, The**	*dr AYC*
—	3	6	**Tenth Avenue Angel**	*dr AY*
—	2	2	**Thirteen Lead Soldiers**	*cri-mel AY*
—	8	7	**Three Daring Daughters**	*mus-com-c A*
—	3	2	**Thunder in the Valley**	*dr-c AYC*
—	2	2	**Tioga Kid, The**	*mus-wes AYC*
3	8	—	**To Live in Peace**	*war-mel AY*
1	13	2	**To the Ends of the Earth**	*doc-mel AY*
—	5	9	**To the Victor**	*war-mel A*
—	—	4	**Tornado Range**	*mus-wes AYC*
—	—	5	**Trapped by Boston Blackie**	*mys-mel AY*
4	8	4	**Treasure of the Sierre Madre, The**	*dr A*
—	—	4	**Twins**	*com A*
—	2	5	**Two Blondes and a Redhead**	*mus-com A*
—	8	8	**Tycoon**	*mel-c AY*
—	3	1	**Under Colorado Skies**	*wes-c AYC*
—	3	5	**Untamed Fury**	*mel A*
—	3	10	**Upturned Glass, The**	*cri-dr A*
—	—	5	**Vacation Days**	*mus-wes AYC*
1	12	3	**Voice of the Turtle, The**	*com A*
—	8	2	**Volpone**	*com A*
—	3	1	**Voyage Surprise**	*com AY*
—	3	2	**Waterfront at Midnight**	*cri-mel A*
—	—	3	**We Lived Through Buchenwald**	*war-doc A*
—	2	5	**Western Heritage**	*wes AYC*
—	—	4	**Westward Trail, The**	*mus-wes AY*
—	—	3	**Whirlwind Raiders**	*mus-wes AYC*
—	1	3	**Whispering City**	*cri-mel A*
—	—	3	**White Stallion**	*wes AYC*
—	2	2	**Who Killed Doc Robin?**	*cri-com AYC*
—	3	—	**Who Killed Santa Claus?**	*dr A*
—	4	2	**Wild Horse Mesa**	*mus-wes AYC*
—	2	3	**Winner, The**	*mus-dr A*
—	2	9	**Winter Meeting**	*dr A*
—	1	5	**Woman from Tangier, The**	*mel A*
—	7	4	**Woman in White, The**	*cri-mel A*
—	11	6	**Woman's Vengeance, A**	*mel A*
—	1	6	**Women in the Night**	*war-mel A*
—	3	3	**Wreck of the Hesperus, The**	*dr AYC*
—	11	5	**You Were Meant for Me**	*mus-com AY*
—	1	3	**Zygmunt Kolosowski**	*war-dr A*

The Consumers' Observation Post

(Continued from page 4)

tance now as a fact that poisons may be absorbed through the skin is currently recorded in a little pamphlet "Clean Air, Controlling Chemical Hazards," series No. 7, put out by the U. S. Department of Labor which notes: "it is now increasingly accepted that poisons in small amounts may penetrate the skin by means of the openings of sebaceous and sweat glands and thus make slight contributions to the body's intoxication. In cases of skin injury due to accidental lesions or defatting by the use of solvents or harsh cleaning soaps, the skin portal may prove of more importance than has been generally recognized."

* * *

AMERICANS WHO TAKE ORANGE JUICE as a breakfast appetizer would do well to drink it after the morning meal rather than before, according to findings reported by Dr. Joseph F. Volker before a dental association meeting. In recent years it has become the custom in some parts of the country to consume fruits and fruit juices as the first course of a meal. It would appear certain from Dr. Volker's studies that consumption of acid fruit juices should be at the end of the meal as a salad or dessert rather than before the other courses. This simple shift of dietary custom can, it is believed, considerably reduce the danger of harm to the teeth through the action of the acid products that result from the fermentable starches and sugars consumed during the meal.

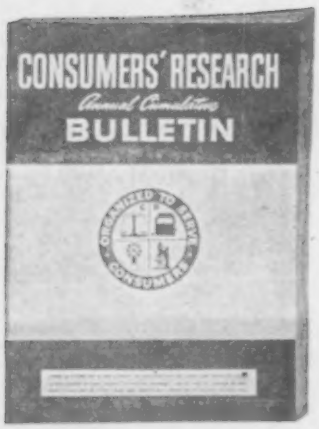
* * *

RECENTLY TESTED:

Pacquins Hand Cream (Pacquin Inc., 155 E. 44 St., New York City). 5-1/4-oz. jar, 89c, plus tax. Found to be essentially ammonium stearate (3%), stearic acid (12%), glycerin (15%), water (70%), with a trace of perfume. This is a

COMING

CR's 1948-49 Annual Cumulative Bulletin



READY IN OCTOBER

MEMO To CR Subscribers:

As many of you know, the ANNUAL CUMULATIVE BULLETIN presents in summary form a wide range of previous findings and a wealth of new material that has never before appeared in any CR Bulletin. It will run to at least 200 large pages, closely packed with practical money-saving information and ratings of products by brand name, fully indexed.

Use the convenient order form on the next page to place your advance order now, in order that you may be among the first to be sent a copy as soon as the book is off the press the last week in September. It is priced at $1.50 to individual subscribers; $2.75 to other individuals. (Since the "ACB" is a confidential issue, we regret to say that we are unable to accept orders from libraries and schools.)

typical vanishing cream formula. The amount of glycerin used is somewhat high and might be objectionable for use on "dry" skins. It is certainly not to be recommended as suggested for "dry, chapped, rough or chafed skin," for which a greasy emollient containing lanolin will be more effective in lubricating the skin.

Wilt Before-Shave Beard Softener (Distributed by Wilt, Inc., Long Island City, N. Y.). 4 fl. oz., 79c. Found to be essentially a synthetic detergent (soap substitute) in water. Composition was estimated as water (78%), ethanol or ethyl alcohol (6%), sulfonated synthetic detergent (15.5%), sodium sulfate (0.5%), with coloring matter and perfume. Wilt would have a softening action on the beard, but lacks one of the properties considered helpful in producing an effective shave, namely that of providing a stiff supporting medium for the hairs, whence it must ordinarily be used as an "accessory" to a shaving cream. (The instructions for use of Wilt—except with an electric razor—call for an application of lather or brushless cream on top of an application of Wilt.) A synthetic detergent solution might be useful to some extent as a wetting agent to hasten the softening action of the shaving soap or cream, but except for men with unusually tough beards, its use would hardly be worth the extra expense and effort. Indeed, Lester Hollander, M.D., and Elbridge J. Casselman, S.B., in their classic study of shaving techniques found that synthetic detergents incorporated in brushless creams were slower in softening action than soap.

Extenders for bed rails (Long Boy Sleeping Equipment Co., 5847 S. San Pedro St., Los Angeles 3) come in two sizes, 6-inch and 10-inch, and give that added length to the ordinary bed needed by all tall people who measure more than six feet. They are available in retail furniture stores and bedding departments for $9.95 per pair for the 6-inch and $11.95 for the 10-inch. The extenders are claimed to fit any bed with wooden or steel rails and are fitted on one end with hooks similar to the end fittings of ordinary bed rails; slots in the other end fit the hooks on the end of the bed rail. Finishes available are walnut, mahogany, and glazed maple.

Setfast Wood Preservative (Interchemical Corp., Fair Lawn, N. J.), selling at $1.15 for a 1-qt. tin, has been found to consist of Stoddard solvent (a high flash point petroleum naphtha of a kind much used for dry cleaning), 40%; raw linseed oil, 37%; copper naphthenate, 23% (not the copper salt of cyclohexyl carboxylic acid as would be indicated by the name). Copper naphthenate is a well-known anti-mildew substance. It has been much used for the rotproofing of sandbags and other utilitarian fabrics, and is well known as a wood preservative.

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Off the Editor's Chest

(Continued from page 2)

retical economic system or Utopia.

The deficiencies of mass-produced products are real, but they are *very much less important to the average man* than the deficiencies which go with appliances and the like which are custom-built. The *Rolls-Royce*, for example, is an eminently fine car, but only a few consumers can afford to buy it. Millions of people *can afford* to buy and do buy American-made cars made in mass production, which cost only a small fraction as much. There are semi-custom-made radio-phonographs in the same class as the *Rolls-Royce*, but there are few indeed who feel that a thousand dollars up is an amount which they would care to put into buying such an appliance.

An inspection visit of an hour or two to a well-planned assembly line will serve to demonstrate the fact that mass-production techniques are capable of providing an extremely large output of low-priced and medium-priced goods, and will make it quite clear why articles which are turned out by hand building and adjustment methods must cost a great deal more than production-line articles. The production of large-volume items cheaply is not a matter of manufacturers' desire for higher profits, but rather inherent in the *consumer's desire for a wide variety of cheap goods of moderately good quality*. In the case of the small radio receiver, for example, the design originally submitted by the engineer was not carried out in the finished product as finally planned for the assembly line because a certain feature did not lend itself to the assembly-line technique of manufacture. A radio set which incorporated that feature would have required much hand labor and adjustment at considerably higher cost and selling price, and, correspondingly, with a smaller number of customers willing to buy it. The compromise was a necessary one in view of the average consumer's satisfaction with a moderately good product at a low price, and his willingness to forego a super-quality product selling for two or three times as much.

In this particular product, there was no great loss in any event, for there is no possibility of obtaining high-fidelity reproduction of music or voice in a small set, and it is quite unlikely that even consumers with considerable income would have much interest in obtaining a better table-model set than was provided by the production-line technique. One production-line radio examined by CR was of very high quality within its limited size, and number of tubes, yet so far as we can ascertain there has been no demand whatever for a somewhat more expensive set of better quality and greater refinement made according to the same general design, which it would be easily possible to build; this is apparently for the reason that only persons of quite large income would think it worth the trouble and expense to have such a small and hence inherently limited set refined to the highest practicable degree.

Assembly-line products have other advantages than low cost. When their production is large, it becomes possible and profitable to work out each process so that it is handled with the best and most efficient tools, specially designed and built for the job. Sometimes component parts of special type and grade are prepared to fit best into the mass-production scheme. While theoretically a custom-built job might be better, even that presents exceptions, in that the workmen available will not all be first-class, capable of exercising good judgment, and using and observing measuring and testing instruments precisely. The availability of super-skilled workmen is always severely limited, whence it follows that the mass-production line is a concession not only to the American consumer's need for and wish for goods of moderate quality in large quantity, but is also necessitated by the fact that there are not and never can be enough highly skilled and conscientious workmen to produce the large volume required to supply the huge American market for appliances, wearing apparel, and office equipment. Radio sets and refrigerators have until recently been very scarce, and probably not one-third of the number of people would have been accommodated by products of these kinds had they been dependent upon the old-fashioned, slow-moving methods of manufacture such as obtained in the beginning of the manufacture of these two items 20 to 30 years ago.

There is a demand for custom-built products, but no one we can think of would want a custom-built refrigerator or washing machine if he had to pay the extra cost involved in its production on the *Rolls-Royce* or pre-*Ford Lincoln* automobile basis. The great majority of Americans have indicated that they wish an abundant supply of a wide variety of products moderately priced. Judging by our national prowess in producing an overwhelming flow of the implements of war at a time when national survival depended upon the results, the people's choice was a sound one. It is to be hoped that a sufficient number of consumers will take the trouble to acquaint themselves with the mechanics and nature of the techniques that are required to supply their demands for goods that they will not be tempted to permit bureaucrats and official "planners" to replace a marvelously efficient system of production with something "theoretical," that has given no evidence of effective, productive performance anywhere in the world.